Educational Screen

Combined with

Visual Instruction News

MAY, 1932

VOLUME XI NUMBER 5

CONTENTS

Editorial 132

The Picture Lending Library of The Buffalo Museum of Science. Ruth Edwards Norton 134

An Experiment in Visual Education in Elementary College Chemistry. B. S. Hopkins and H. G. Dawson 136

Units of Instruction for Teacher Training Courses (No. 5) L. Paul Miller 138

Visual Instruction in Indiana. George McIntire 139

Film Production Activities 141

News and Notes. Conducted by Josephine Hoffman 142

Department of Visual Instruction Notes. Conducted by Ellsworth C. Dent 144

Among the Magazines and Books. Conducted by Marion F. Lanphier 146

The Film Estimates 147

The Church Field. Conducted by R. F. H. Johnson 148

School Department. Conducted by Dr. F. Dean McClusky 150

Among the Producers 158

Here They Are! A Trade Directory for the Visual Field 160

Contents of previous issues listed in Education Index.

THE EDUCATIONAL SCREEN, Inc.

DIRECTORATE AND STAFF

Herbert E. Slaught, Pres. — Stanley R. Greene
Frederick J. Lane, Treas. — Joseph J. Weber
Nelson L. Greene, Editor — William R. Duffey
Ellsworth C. Dent, Manager — R. F. H. Johnson
Evelyn J. Baker — Marion F. Lanphier
Josephine Hoffman — F. Dean McClusky
Otto M. Forkert — Stella Evelyn Myers

General and Editorial Offices, 64 East Lake St., Chicago, Illinois. Office of Publication, Morton, Illinois. Entered at the Post Office at Morton, Illinois, as Second Class Matter. Copyright, May, 1932, by the Educational Screen, Inc. Published every month except July and August.

$2.00 a Year (Canada, $2.75; Foreign, $3.00) Single Copies, 25 cts.

EDITORIAL

WE WOULD propose for careful consideration by all our readers in the visual field—and by the Visual Instruction Department of the N. E. A. in particular—a project to be developed for the coming Century of Progress Exposition in Chicago in 1933. The suggestion came from a member of the magazine staff, has been studied and elaborated by the entire staff, and has recently been submitted to certain recognized leaders in the educational field. The emphatic approval bestowed upon the embryonic plan by all who have been consulted confirms our own conviction that the project holds really great possibilities for the national cause of visual instruction.

A Project for the Visual Field

The project aims to give a complete and continuous demonstration of actual visual instruction, in all subjects, for all grades, with all sensory aids already proven valuable. This demonstration would constitute the soundest and most effective propaganda the visual cause has ever received—would reach a greater public in the brief duration of the Exposition than has been reached in the past ten years of printed and vocal effort to the same end—and would in itself present a perfect and impressive example of visual instruction. Following is a brief outline of the idea.

SECURE in the educational section of the Exposition a space sufficient for two small enclosed classrooms, juxtaposed, divided by one solid, opaque wall common to two rooms. This common wall will be the front wall of each room, carrying blackboards, maps, charts, screens, etc., pupils seated to face toward it. The other three sides of each room may be lined with drawers and cupboards to a height of three or four feet. Above, the three walls would be glass to the ceiling. Each room will be sound-proof, electrically lighted, and with perfect artificial ventilation. Microphones within will make every sound audible outside. Sounds from outside will be inaudible within. The teacher and class will work inside, undisturbed by foreign sounds. The public outside can see every move and hear every word spoken by teacher or pupils.

The unit would be located preferably between and bordering upon two parallel corridors, which are public thoroughfares, the two side walls of each classroom abutting on the corridors. The entire passing public, therefore, would have a side view of each class at its work, and could hear all that is going on within. Outside the rear wall of each classroom would be an enclosed space, with seats and sloping floor, where the most interested spectators could get away from the noise of the corridors for serious study of teaching methods.

Each room would contain permanent equipment of material and apparatus. Classes would be definitely scheduled through the period of operation, say two or three hours each day.

One room might serve grades I to IV, the other grades IV to VIII, so that visitors would always have a choice of higher or lower grades for observation, according to their major interest. Detailed schedules of subjects, topics, teachers, class personnel and I. Q's would be kept constantly posted in the adjacent corridors, and printed regularly in Exposition programs.

Pupils, and most of the teachers, should come from a nearby school, regularly operating a summer session, and using visual aids continuously. Proper and reliable transportation must be arranged to insure smooth operation on schedule. Classes need not be large but they must arrive on time.

It should be possible to enlist from all over the United States occasional services of able teachers who have developed new and significant methods for teaching particular topics. The correct integration of such special classes into the continuous curriculum of the sessions would be one of the nicest problems for the central administration handling the entire project.

THE year to come is none too much time for adequate preparation for a project of this novelty and complexity. The financing, the organizing and the supervising of such a work constitutes a tremendous task. Perhaps three small committees, from an interested University School of Education, from a city school system, and from the national Visual Instruction Department of the N. E. A.—cooperating as a joint committee under a single supervisor and administrator—would be the method.

Large and numerous difficulties loom, of course. But were they twice as large and numerous they should be tackled. The visual field has never had such an opportunity to permeate the national consciousness as is offered by the coming "World's Fair." Visual instruction can be appreciated by millions—not by mere thousands as in years past—by such an irresistible demonstration of its vivid appeal, its potency, its present actuality.

May the Visual Instruction Department of the N. E. A. be able to say in 1934, and long thereafter, *omnium earum rerum pars magna fui.*

NELSON L. GREENE.

The 3 NEW DA-LITE SCREENS

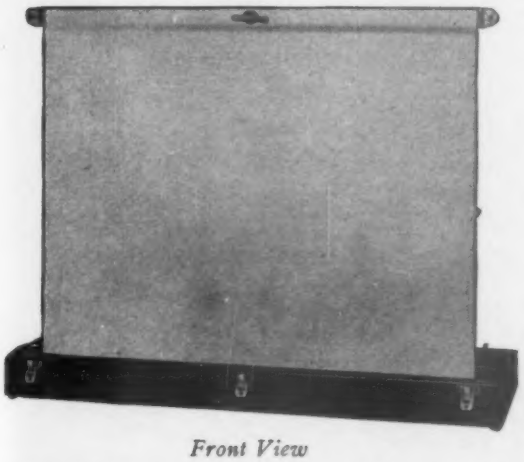
Rear View

Closed

The DA-LITE Model "F"

A screen that combines the advantages of the Da-Lite glass bead projection surface, compactness, simplicity, rapid set-up, and low price. The Model "F" stands firmly on a pair of folding feet. The upright support bar swings down parallel to the case when the screen is collapsed for carrying. Ruggedly made and beautifully finished, the DA-LITE Model "F" invites comparison at the following prices.

22 x 30 $13.50 30 x 40 $16.00
36 x 48 $18.00



Front View

DA-LITE—pioneers in the development of projection screens—always ahead—ever anticipating the industry's needs! Da-Lite advanced thought scores again with three brand new and very worth while ideas, of particular interest and import to the world of visual education. Three new screens, to meet three urgent needs! Here they are:

Front View

The DA-LITE MODEL "A" *with* TRIPOD

The Da-Lite "A," the most famous of all portable, table-type screens, may now be had with a specially built, thoroughly rigid, adjustable, collapsible tripod stand. The Da-Lite "A" is distinguished by its unique mechanism for automatically raising the screen or returning it to the box. Also by the patented stretching device which brings the projection surface to perfect, wrinkle-free flatness. Now — with the tripod stand, the Model "A" may be used at any desired height from the floor.

22 x 30 $20 30 x 40 $25
36 x 48 $30 39 x 52 $35

Tripod Equipment — $5 Extra

Must be ordered when screen is ordered

The MODEL "A" DA-TEX *Translucent Screen*

Here is a collapsible, portable screen for rear projection. It's the Da-Lite "A" in all respects excepting that it has the DA-TEX translucent projection surface instead of the glass bead. The same clever mechanism raises and lowers the screen; the same stretching device brings the surface to plate-level smoothness. The Model "A" DA-TEX may be had with tripod equipment.

22 x 30 $20 30 x 40 $25
36 x 48 $30

Tripod Equipment $5 Extra
If Wanted, Must be Ordered When Screen is Ordered

◆ ◆ ◆ ◆

The Da-Lite line of superior projection screens is the most complete line the industry affords. Completely descriptive literature sent upon request addressed to

The DA-LITE SCREEN CO., INC., 2721 N. Crawford Ave., Chicago.

The Picture Lending Library of the Buffalo Museum of Science

RUTH EDWARDS NORTON

ALTHOUGH Americans have today generally accepted art as a delightful and interesting field for study and recreation, one which is now both respectable and respected, there is still that feeling that perhaps it is not the most manly of pastimes. Some of this feeling is, of course, being dispelled by the sound business possibilities in art. A painting or piece of sculpture well-chosen is a good investment; with the passing of time its market value increases.

Another and more useful cause, however, for the hesitancy of most people to cultivate the arts is the thought that it requires a specially trained intellectuality to understand and appreciate them. This, of course, is wrong for, though the more one knows about any subject, the greater is his enjoyment of it, beautiful creations can and should be enjoyed by every one.

Recently a man from the great army of unemployed entered an art gallery with the sole purpose of keeping warm. He wandered aimlessly at first through the galleries but was soon noticed to be gazing more intently upon certain paintings and to return again and again to them. Finally he went to the director and asked for a job in order that he might stay in the midst of this new-found beauty. He was immediately given the duties of a guard and his interest given full opportunity and encouragement to develop.

All of us, however, are not impelled by the need for warmth to enter our galleries, and there are many who feel they would like a little working knowledge with which to fortify themselves before assailing the doors of that holy sanctuary. Or, having entered it and having had their interest caught, they wish to know more about the things upon which they have looked. For these people the Buffalo Society of Natural Sciences has instituted another among its many services.

The Picture-lending Library at the Buffalo Museum of Science came into being through the development of the Division of Visual Education. Some years ago this Division was begun by the Museum with the idea of loaning lantern slides of natural science subjects to the public. Soon the demand for slides on travel subjects was felt, and this material was added. And so the collection grew until it came to include slides on almost every subject which the public demanded, including art. There are now over 6,000 slides on art alone, grouped in sets many of which have accompanying manuscripts and which quite thoroughly cover the history of art from early cave drawings to, and including, the modern movement. These slides, together with a lantern, may be borrowed without charge by any one who is a member of the Society or who has a card signed by a member. The Buffalo Society of Natural Sciences was the first institution in the country to offer this free lantern and slide service to the public, and the enormous use which is made of it has proved its value.

For carrying on this service the Buffalo Museum of Science has developed a fully equipped and operating organization, and, as it was, and still is, the only one in the city, full scope was given in extending it to meet all the needs of the community. And another need did arise—a need for pictures which could be seen and observed for a longer time and without the aid of a lantern. A great many splendid Alinari and Anderson photographs of famous works of art had been bought previously in order that the Museum might make their own slides from them and thereby build up a file of negatives. From these the Museum's slide collection could more readily be replenished when necessary. With these splendid reproductions on hand the idea was conceived of loaning them also. And so started the Museum's pioneer Picture-lending Library.

The pictures have been mounted on uniform and attractive photomounts. On the back of each one is an envelope containing two cards, one of which gives a short sketch of the artist's life and the other an appreciation of the particular painting. We do not, of course, mean this appreciation to be considered as final. One may heartily disagree with it. It is only the interpretation of one person, and the feeling about a painting, or any work of art, must necessarily be a personal one. Our interpretation, however, may lead those interested to see new things and provoke them into analyzing and forming their own opinions.

As in the case of the slides, anyone may borrow these pictures without any charge whatever. They may be kept for two weeks and then exchanged for new ones.

Since the beginning of this service the Museum's collection has been added to, mostly through gifts, until there now are almost 700 exceptionally fine photographs and prints of famous paintings and sculpture, many of them in color.

One of the main projects is our work with the schools. Art, more than any other subject, demands visual aids for teaching. They are, in fact, essential. Art is created to appeal through the eye and in no other way can it reach us. The Buffalo Museum of Science, therefore, as the only visual loan center in the city, is doing everything it can to supply the schools with this necessary material. Included in its collection are, of course, the pictures recommended by the Board of Education for study in the grades. These, as far as possible, are in color, as it is color that most appeals to children. It is an encouraging fact that

A Complete Picture Unit

good and accurate color reproductions of pictures for children are now being published at a nominal cost. But it is far from easy to procure true color reproductions of the less popular subjects so most of the prints for more advanced study are in black and white. A poor color print does far more harm than good.

Aside from the lists provided by the Board of Education the Museum has tried to meet the individual demands of the teachers. We have solicited lists and suggestions from them and have noted the frequency of requests for certain pictures and types of pictures. Seasonal subjects are particularly in demand for grade study and such subjects as can be related to the other school work.

Several schools have begun a series of loan exhibits, borrowed from us. Groups of pictures are selected and exhibited, a new group being hung every two weeks. Two of the schools allow the children to choose the pictures themselves.

The radio is another source of educational interest with which the Buffalo Museum of Science works. Programs, such as the Art Appreciation talks broadcast by the American School of the Air, are posted, together with the pictures to be discussed, and they may also be listened to in the Radio Listeners' Room.

Having one central loan bureau for all visual education material has been felt to be of decided value. Aside from the question of time and energy involved, the fact that the material is at hand is an inducement to make use of it. Teachers who come to borrow slides or charts for other subjects, borrow at the same time, art slides and mounted pictures—teachers who otherwise might not have felt it incumbent upon them to give their pupils much art instruction. And art teachers borrowing art material find it convenient to get history and geography slides for teaching the background necessary to a study of art. With the enlarged curriculum of modern schools it is not easy for the teacher to find time for extra outside work, no matter how helpful it may be.

As the Picture-lending Library has become more widely known, the loans have increased remarkably. Most of the borrowers are teachers, but the demands are most interestingly varied. Mothers borrow them to frame and hang in their homes in order that their children may become familiar with them by seeing them thus constantly for two weeks. Many of them bring their children and let them select themselves the picture that most appeals.

This is a splendid way to introduce your children to an appreciation of fine art. Children soon tire of one thing. Constant change is needed to hold their attention. One man I know whose children are still more or less in the infant stage, proposes to buy a number, fifty or more, prints, as fine as he can get, including etchings and wood-block prints whenever possible. These will range in subject from such things as Durer's "Rabbit" and Rembrandt's delightful sketch of an elephant, which might interest the youngest child, up to the more advanced subjects which the child will be able to appreciate as it grows older. Only two or three pictures will be hung in the nursery at a time and they will be changed frequently, thus constantly renewing the interest of the child and making him accustomed to seeing the best artistic creations. What the child absorbs in this way he can never lose.

There are hundreds of such pictures from which to chose — compositions by the greatest artists in the world — and subjects which any and every child would love immediately. It is splendid to *own* such a collection, if possible, but, for all those who wish, such a collection may be enjoyed, without cost, by borrowing from our Picture-lending Library.

(Concluded on page 140)

An Experiment in Visual Education in Elementary College Chemistry*

B. S. HOPKINS
H. G. DAWSON

DURING recent years it has been the custom at the University of Illinois to show motion picture films to some of the advanced classes, especially those who are interested in certain industrial processes. Frequently students from the elementary classes were invited to witness these displays and many films of particular interest to the Freshmen were shown for their special benefit. These showings were not made during regular class hours and attendance was optional. In general the interest was good, but there was no indication that these efforts were improving scholarship, increasing interest or promoting the welfare of chemical education.

In February 1931, the Freshman classes were moved into a new building which had complete equipment for showing silent motion pictures. Accordingly it was decided to undertake a study of the educational value of motion pictures, film slides and regular lantern slides, when these are incorporated in the regular lecture work of a course. The time of one assistant was devoted to various problems connected with the study, such as the collection of material, editing of films, making suitable slides, arranging and cataloging material and operation of the projectors.

It was concluded that if visual education was to be successfully applied to our problem it must be incorporated as an integral part of the regular sessions of the class. Accordingly the plan selected was to present during the regular lecture periods, either lantern slides or motion picture films to illustrate the topic under discussion. This plan involved three very important considerations: (1) a very careful study of available material with the presentation limited to those portions which are of definite educational value in the teaching of chemistry; (2) a complete understanding between the lecturer and the operator regarding what materials are to be shown and the order of their display; (3) a decided modification of the lecture plan in order to save time and to bring out without repetition the full educational value of the various visual aids. A somewhat extended study of each of these considerations is worthwhile.

Our first problem was to make a comprehensive study of material available for visual education purposes. Accordingly the semester outline was carefully scrutinized and all suitable topics were selected. Thorough search was made for slides and motion picture films based upon these topics and for pictures or drawings from which illustrative material could be prepared. After diligent search we concluded that we should be compelled to make our own slides since those available were not suited to our purpose. Accordingly many slides were made to furnish such illustrations as would permit the lecturer to present his material more clearly, more concisely or with greater interest. At first these slides were prepared from all available sources such as the illustrations and diagrams in textbooks, periodicals and advertising literature, but this search consumed too much time and after all did not give a complete set of slides. It is more efficient to study thoroughly the material to be presented in a given lecture, select five to ten subjects for slides and search for this material. We have found that slides made from cross section diagrams and tables of comparative data to be far more valuable than those made from photographs of industrial equipment although the external appearance is of interest. In general, preference was given to illustrations similar to those appearing in the textbook used in the course in order that the student might not be burdened with the necessity of copying down extensive descriptions or tabulations. The use of lantern slides produced excellent results and it is our opinion that their use will continue to play an important part in the development of visual education in a subject which is as involved as general chemistry.

Filmslides were not used extensively. Those available were not prepared for use in chemistry classes and were entirely too elementary. Although filmslides are more convenient than glass lantern slides, they are expensive to prepare and do not permit easy rearrangement. However, the glass lantern slide is fragile, heavy and expensive unless purchased in large quantities. We have experimented with a lantern slide made on a safety (cellulose acetate) film base which promises to be light in weight, cheaper and durable.

In the field of motion picture films there is available a very large amount of material which may be secured at little or no cost, since many manufacturing concerns loan films to anyone who is willing to pay the transportation charges. We have found that dependence upon this sort of material involves at least two serious difficulties: (1) it is necessary to make reser-

*Presented before the Symposium on Visual Aids of the Division of Chemical Education at the A. C. S. meeting, Buffalo, September 2, 1931.

vations several weeks in advance because the worthwhole films are busy. In conducting a course in chemistry it is obviously difficult to live up to a rigid schedule in order that a certain film may fit in at the proper time. The uncertainty concerning the arrival of the film on schedule is also a complicating factor which is frequently encountered. (2) All of the commercial films which are now available contain too much advertising. Many of the distributing firms insist that their films must be shown without the elimination of any portions. To comply fully with this request would largely defeat the purposes of visual education, because of the heavy demand of time, and because so much of the film has no value so far as the purposes of chemical education are concerned. Such difficulties as these are perennial if we are to depend on borrowing or renting films.

A method of completely eliminating these difficulties is presented by the outright purchase of the film. The advantages of owning the film are obvious. It is possible to cut out all those scenes which are of a non-chemical nature; the film is always available, so its display at the psychological moment presents no difficulties; and if a second showing for review is desired, there is no embarrassment. The great disadvantages of purchasing films come from the cost and the fact that so much of the footage is waste. To compile from commercial sources a library of motion picture films which would adequately cover a year of general chemistry would obviously require a considerable investment.

In the realm of educational films a much better situation exists. There is a considerable list of science subjects, and these films are arranged for their educational value. Typical scenes from the best sources have been selected and skillfully assembled to give a definite and fairly complete story of the process. In these films a minimum of space is devoted to titles, in order that the picture display may be more complete. It is expected that whatever explanation is necessary will be supplied orally, and to assist in this phase of the presentation each film is accompanied by a Teacher's Guide which supplies all necessary information. This plan permits the chemistry teacher to select a definite topic, to present those portions of the film which fit in with his lecture plan and to do it all without waste of time, and without the necessity of showing time-consuming titles or non-chemical subject-matter.

While these educational films show that a great step in advance has been taken, there are still some features of the present situation in which improvement is to be desired. From our experiences the following suggestions are offered. First the list of offerings should be materially extended, because at present there are many of the most important topics in general chemistry which are not represented. This statement applies with particular force to the field of theoretical chemistry, since most of the films now available deal with applied chemistry. It is of course no simple task to devise a film which will adequately represent a fundamental principle of chemical science. Such a film will require long study, patient effort, the most skillful direction which can be obtained and the friendly cooperation of teachers who are willing to help. It is very obvious that the assembling of a series of such films will be an expensive process and no firm can afford to undertake the task until they are assured that the resulting films will be used by a considerable number of teachers. It is probable that developments along this line will be very gradual, at least so far as the immediate future is concerned.

A second improvement in our present educational films, which would make them of greater value in the teaching of chemistry requires a thorough editing by an experienced teacher of chemistry. The films which are now available have been prepared for pupils in geography, nature study or general science. The films still contain much material which is not chemical in nature, the showing of which consumes valuable time and detracts from the central thought of a chemical lecture. We need a series of films which have been assembled especially for the use of chemistry students, which will eliminate as much as possible the purely mechanical steps in a process and which will not hesitate to use chemical terms and to emphasize the chemistry involved. When such a collection of films is available for the illustration of chemical industries, and these are accompanied by skillfully devised films on the fundamental theories, then visual education will be in a position to assume a prominent place in the teaching of chemistry.

A third suggestion for the makers of chemistry teaching films is that much greater use be made of animated diagrams. In a chemical process it is of course important to show how the raw material looks when it enters a vat or a machine and then to show its changed appearance or properties after the treatment has been completed. But the chemistry student needs to know how these changes were produced. If a chemical change has resulted he should know what the change is and how it has been brought about. The use of animated diagrams permits him to visualize each step in the process and to get a clear mental picture of the chemistry involved. Some films which accomplish this task admirably are now available but their number should be greatly increased.

(To be concluded in the June issue)

Units of Instruction for Teacher Training Courses (No. 5)

How Are Classrooms Prepared for Projection?

L. PAUL MILLER

(A) *What are some precautions which should be observed in using projection equipment?*

The following are suggested by Spencer Lens Co.:

(1) Do not attach a 1000-watt bulb to a house wiring system without first having it inspected by some one competent to determine whether or not it can carry the load.

(2) Do not connect any bulb to a wiring system without first being sure that the voltage of the system is that for which the bulb is made, or that a proper resistance is inserted.

(3) When new bulbs are inserted, see that the socket is so rotated in its mount as to bring the filament to the correct position. When pre-centered bulbs are used, the filament will always be properly centered when the bulb is in place.

(4) Keep optical parts clean.

Difficulties:	Reasons:
(a) If there is a blue shadow in the center of the screen	(a) The light is too near the condensers.
(b) If a yellow shadow is evenly distributed around margins	(b) The light is too far back.
(c) If a shadow appears at the top of the screen....	(c) The light is too low.
(d) If a shadow appears at the bottom of the screen	(d) The light is too high. (Similarly for sides)
(e) If spots appear in the field	(e) The condensers are dirty.
(f) If there is a general haze over the field	(f) The objective is dirty.
(g) If the lines in the picture are not sharply defined..	(g) The instrument is improperly focused.

Author's Note: This is the last of a series of lessons on the general subject of physical factors of projection. The series is part of a set of forty-five units of instruction which have been in use experimentally in visual education courses for practice teachers, and for teachers in service. No claims are made for originality. The material for each unit has been gathered from all available sources, and organized for convenient reference. The question is merely raised, as to whether it would be helpful to have a laboratory manual, or work-book, for visual education courses in teacher-training institutions.

(B) *How are classrooms made dark for projection?*

For obtaining the best results, darkened or partially darkened rooms are needed. There should be a room, or several rooms, in every school, equipped for projection. Methods of darkening rooms are:

(1) Dark shades at each window.

(2) Wide shades, made to order, to cover two or three windows.

(3) Heavy curtains, drawn by means of a cord and pulleys, preferably one cord controlling all curtains.

(4) Home-made shades of heavy material, operated like porch sun-screens, rolling on cords.

It is essential that rooms be so equipped that they can be prepared quickly for projection. No more time should be used to prepare for projection, than is used in average school rooms for ventilation.

(C) *Must classrooms be dark, for projection?*

For projection of motion pictures, there should be complete darkness. It is best to have a specially prepared projection room for showing films, not only because of convenience in darkening the room, but also because the projector can be kept in a fixed place. There is danger of damaging a machine in moving it. No projector should be jarred, particularly, while the filament of the lamp is hot.

Glass slides and film slides, and opaque pictures, can be projected in a room in which the ordinary window shades are drawn, if projectors with lenses of short focal lengths are used, back of translucent or "daylight" screens. The images on the translucent screen are fairly sharp, if the apparatus is properly placed. The advantage of the "daylight" arrangement is that a few pictures can be thrown on a screen during a lesson, without the necessity of darkening the room, and hence without any interruption in the classroom procedure. There are projectors specially made for "daylight" projection.

(D) *How is apparatus placed, for "daylight" projection?*

(1) Place the translucent screen before the projector at a distance of about five feet, or as far as the size of the screen will permit. A larger screen can be placed farther.

(2) The corrugations of the screen must be toward the class.

(3) The center of light from the projector must be on the center of the screen.

(4) No strong light must come between the screen and the projector. The screen should be on the opposite side of the room from the windows, and no light should strike it from the back except that from the projector.

(E) *What kinds of screens are there?*

(1) Opaque screens,

(a) heavy white cloth,

(b) aluminum coated, (useful for opaque objects and micro-projection, but should be used only when audience is within an included angle of 60 degrees from the center of the screen.)

(c) sateen, (especially for portable outfits).

(2) Translucent screens, for use in comparatively small rooms, and with projectors placed back of the screens.

Verbal Aids:

Dorris, Anna V., "Visual Instruction in the Public Schools," P. 172.

Abrams, A. W., "Classroom Equipment for Visual Instruction," Educational Focus, I:8-9. Sept., 1929.

Catalogues of companies supplying projection equipment.

Visual Aids:

Exhibit of screens, and other accessories.

Visual Instruction In Indiana

GEORGE McINTIRE

THERE is no better way of leading pupils to a world beyond the four walls of the classroom than the visual way. In a few brief years the pupils who are in the classrooms of the various schools of our country will be forced to live in the great world outside and somewhat remote from the guidance of educational institutions. Visual methods of instruction enable them to secure a more vivid picture of this great community in which they will live. In Indiana much constructive work has been done. However, schools having visual programs seem to cluster about certain sections of the state. This fact is evidently due to one or both of two existing factors. Either economic conditions have an influence on the quantity of equipment furnished for school use or the influence of one school having a successful visual program has gone a long way toward leading other schools in the same locality to the adoption of an extensive program for the use of modern visual aids. Each locality has ideas differing from those of other communities. For this reason no uniform program has been developed for the state as a whole.

Perhaps the most outstanding differences of practice exist in the method of administering the visual program. Less than five per cent of the 183 schools reporting a visual program designate a member of the faculty as acting director. One individual who feels the responsibility of conducting a department may accomplish more than a number of individuals working with no specific scheme of procedure. In the smaller schools a teacher could be designated as director of visual instruction on a part-time basis. Each school would then have a visual instruction department though the working materials were only a few pictures clipped from magazines and booklets or a few models and exhibits obtained from industrial concerns. The important point is that the appointment of a director would be a beginning and no one can predict the results for the possibilities are unlimited.

An individual acting as director would bring out and make use of equipment that would otherwise remain idle. A well known author in the field of supervision of instruction says that if the equipment now gathering dust in remote corners of the school buildings could be put into use, a wealth of materials could be had which has only required the teacher's touch to give it effectiveness. In Indiana approximately eighty per cent of the schools have some type of visual program. Of this number 43 per cent have 35 mm. equipment, 11.5 per cent have 16 mm. equipment, 18 per cent have opaque projectors, 21 per cent have film slide projectors, and 75 per cent have glass slide lanterns. Five per cent of the glass slide projectors and 14 per cent of the motion picture projectors were not in use during the school year 1930-31. This was in part due to economic conditions which made necessary budget reductions in many schools of the nation.

The mere fact that projection equipment was in use

does not means that such equipment was used extensively. Lantern slides were most extensively used. Fifty-five per cent of the 183 schools reporting a visual program have slide libraries in the school buildings. The number of slides used for the school year averaged 888 with a range from 20 to 5,000 slides. Thirty-two per cent of the schools make use of "home made" slide equipment. Twelve schools report that photography is taught in connection with science courses. This affords an excellent opportunity for making lantern slides from negatives brought in by students. One school added 150 slides to the school slide library in this manner. It is interesting to note that slides cost very little when they are made in the school laboratory.

When schools have no slide library, or when the library is incomplete, the director may order slides from the State University and other distributing centers. Fifty-three per cent of the schools receive slides in this manner. When slides are owned by the school, the saving in postage and express charges aids materially in adding new slides to the collection. The following table lists the number of schools making use of rental materials and the number of schools maintaining a school library of slide and film subjects.

Number of Schools Making Use of Slides, Films, and Exhibits

Type of visual material	Schools with less than 100 pupils	Schools with 100 to 200 pupils	Schools with more than 200 pupils	Total
OWNED				
16 mm. films	0	2	8	10
35 mm. films	0	0	8	8
Glass slides	24	36	42	102
RENTED				
16 mm. films	2	7	14	23
35 mm. films	7	12	28	47
Glass slides	20	48	33	97
FREE				
16 mm. films	3	5	11	19
35 mm. films	5	8	35	48
Exhibits	5	8	11	24

Only 10 per cent of the schools own motion picture subjects while approximately 56 per cent own slides. Films are more expensive and a given subject is not in use as frequently as a set of slides. For this reason films may be rented although a library of the most frequently used subjects is desirable for the larger school systems. However, the problem of rental and ownership is largely a matter of concern for the individual school. Of greater importance is a method of encouraging all schools to use visual materials. If

(*Concluded on page* 149)

Picture Lending Library of Buffalo Museum

(*Concluded from page* 135)

There are many other types of people who use the library. Art students find these pictures invaluable for supplementing their school work and text books; study clubs borrow them; ministers, Sunday schools and other church organizations; social settlement workers; and, of course, the individual who loves them and wants them merely for himself.

Many of the experiences that one has with these individuals are both amusing and encouraging. One day a young boy of about college age came hesitantly into my office and asked if I had any pictures of paintings. I said I had and asked him what sort of paintings he liked. He wasn't exactly sure. So I started showing him some at random. I soon found that he was very eager to see more but very shy and embarrassed about taking so much of my time. So I turned the key over to him and told him to look through the pictures himself as much as he wanted. He immediately sat himself on the floor, and it wasn't long before he forgot his embarrassment and was asking about this picture and that and giving expression to his own opinions. In the end he selected several pictures to take home with him. Having broken the ice that once, doubtless future attempts on his part will be less of an effort.

Just recently the Museum acquired quite a few examples of modern art. Although I had thought modern art to be quite thoroughly accepted, I found that controversy still rages. I put some of them up in the cases in my office and awaited results. I had not long to wait. An adult came in. (It so happens that we have two Nature Sketching Hobby Clubs which sketch the things about the Museum. One of them is for children.) The adult to whom I referred stopped before a reproduction of a Van Gogh painting and, quite seriously, said: "This is awfully good, isn't it! Really some of your children do remarkable work, don't they?"

To my great surprise it was the children who most truly appreciated the modern work. One boy of about ten or twelve years of age was looking at a reproduction of a Matisse painting which most adults passed with a smile. This small boy, however, immediately remarked, "That's done mostly for design, isn't it, and for color? The color's great!"

Although the Museum's Picture-lending Library is comparatively new, having been begun but three years ago, it has already proved of considerable service to the community. We feel that its possibilities of development in the future are unlimited.

FILM PRODUCTION ACTIVITIES

The aim of this new department is to keep the educational field intimately acquainted with the increasing number of film productions especially suitable for use in the school and church field.

University of Kansas Produces

Three new motion pictures, one on football, one on track, and one to be used in clinical psychology classes, have been produced by the Extension Division of the University of Kansas during the past month.

The football picture covers, play by play, the annual spring practice game of the University of Kansas. The "Varsity" squad of regulars and promising freshmen played an assembled team of former football letter men of the University. The score was 21-0 in favor of the regulars, but the film shows, in slow motion, the successes and failures of certain new formations tried by Coach Hargiss with the varsity squad. The film will be used this spring and next fall for instructional purposes.

The track picture includes normal and slow-motion pictures of field and track events of the Tenth Annual Kansas Relays. In addition, there are slow motion pictures of the leading contenders in the Olympic tryouts, including action pictures of James A. Bausch, who lacked but a few points of tying the world's record for the decathlon. The film will be used for instructional purposes as well as to create still greater interest in this outstanding annual athletic carnival. The film is two reels in length.

The film for use in clinical psychology classes, or with groups which may be interested in the problems of mental deficiency, includes intimate scenes of cases in the State Training School for the Mentally Deficient, at Winfield, Kansas. It was produced in connection with a survey of cases of the higher levels, conducted by Dr. Bert A. Nash, Director of the Educational Clinic, University of Kansas, with the assistance of students in the Graduate Division of the School of Education. The pictures were photographed by Ellsworth C. Dent, using a 16 mm. camera.

This picture includes pictures of inmates of all levels, from the profound idiots to those of nearly normal mentality. The institution is "pammed" from a nearby hill-top, followed by close-ups of the various buildings. The recent development of "super-sensitive" film made it possible to secure some excellent pictures in the hospital and in some of the ward buildings.

The Extension Division at the University of Kansas is considering the production of additional motion pictures and slides, covering the industries of Kansas. If these are produced, they will be available for sale or loan to schools outside Kansas.

New 16mm. Film Releases

Eastman Teaching Films announce the following new films as being ready for distribution.

First Aid Series, consisting of four films, provide accurate demonstrations of first aid technique based on the methods advocated by the American National Red Cross. The titles are: *Life Saving and Resuscitation, Control of Bleeding, Carrying the Injured,* and *Care of Minor Wounds.*

Virginia, the Old Dominion depicts a region rich in geographic, commercial and historical interests. The three units show the Coastal Plain region, the Piedmont Plateau and the Greater Valley.

Peru shows the varied relief features, rich natural resources, transportation difficulties, and living conditions in this country. An animated map outlines the Coastal Lowlands, Andean Highlands, and Interior Lowlands.

Oysters tells the life history of the Atlantic oyster, and the methods used in "farming," fishing and canning. The last unit shows how pearls are formed and assembled into necklaces.

Under-Sea Life illustrates the curious adaptations of animals to meet the needs of food gathering, aggression, protection against enemies, and survival of the species.

◆ ◆ ◆

The Bell and Howell Filmo Library has just released a group of educational films, sixty-two 400-foot silent subjects in all, covering a variety of useful material. The majority of the films are on geographical subjects, dealing not only with the physical aspects of the various lands, but also with the people and their customs and occupations.

Eleven films deal with biology and nature study; two films, *Nature and the Poet,* and *An Indian Legend,* are classed as literary material; and three films are from the group, *Modern Truths from Old Fables.*

◆ ◆ ◆

Apex Films Inc., New York City, has secured the world rights on 16 mm. film for *Tony Sarg's Almanac,* a series of 100-foot animated silhouettes. This is the first time that these stories have been released on 16 mm. film. They are a decidedly novelty, being of particular appeal for the home field.

(Concluded on page 149)

NEWS AND NOTES

CONDUCTED BY JOSEPHINE HOFFMAN

Experiments With Visual Aids

The Audubon Junior High School, Cleveland, Ohio, has demonstrated the value of visual aids in a series of experiments conducted with two ninth grade general science classes. The contributing factors involved in setting up the conditions were equated so far as possible, and neither class was told that its work was to make a showing in an experiment.

The plan of teaching called for the presentation to the experimental group of the regular subject matter in general science plus all the visual aids in slides, movies, models, and exhibits obtainable from the Educational Museum. The control group was taught identical subject-matter but the visual aids were withheld. Greater motivation, more positive conceptions through the medium of sight, and valuable additions to teaching method are some of the values suggested through this experiment.

◆ ◆ ◆

A series of tests was made earlier in the year in Middlesex schools, of England, under the control of the National Union of Teachers with regard to the effect of films on education. The report on this experiment, which has just been published in book form, shows that the film has distinct educational possibilities. Stress is laid particularly on the strong memory of sound films and the lasting vividness of the impressions conveyed. It recommends close co-operation between the industry and educational authorities to provide films more suitable for the instruction of school children.

A similar experiment is being conducted by the education department of Edinburgh, Scotland, who are also holding conferences with the industry to ascertain how to encourage the serious use of motion pictures in education.

Visual Instruction Bulletins

The April issue of *The Visual Talkie*, published by Akin and Bagshaw of Denver, Colorado, contains in addition to announcements of local interest, worthwhile articles. Titles of these are, "The Use of Motion Pictures in Coaching Athletics," "The Motion Picture as a Teaching Aid," and, particularly interesting, "The Talking Filmslide." This device is described by Mr. A. P. Little of the Colorado School of Mines, where it is used in an applied engineering course and has proved a very valuable aid in teaching because of its low cost, simplicity of operation, and the interest taken by the class in the subjects presented.

◆ ◆ ◆

The Projector, the bulletin of the Quincy, Mass., Public Schools, carries in its April issue evidence of the increasing use of visual aids in that city, which is constantly adding one more school to the number of those who possess 100% visual equipment. Of the 26 schools in Quincy, 22 use such aids regularly from the central library, it is stated.

◆ ◆ ◆

The April 11, 1932, issue of *Life Long Learning*, a publication of the Extension Division of the University of California, is devoted to announcements of visual instruction service as offered by the Division. In addition to service announcements, there are brief discussions of the questions, "Is Visual Instruction Economical," and "Sixteen or Thirty-five Millimeter Films". Mr. Robert S. Johnson is in charge of the Department of Visual Instruction of the California Extension Division.

Philadelphia Schools Use Eighty Projectors

Typical of the large public school visual education department is that of Philadelphia, where more than eighty Filmo projectors are already at work in the schools. Dr. James G. Sigman, Director of Visual Education, has a library of over 2,000,000 feet of 16 mm. film, 450,000 feet of 35 mm. film, and 40,000 glass slides at his disposal. In an article in the *Philadelphia Evening Bulletin* he was quoted as saying:

"All the junior and senior high schools and 40 per cent of the elementary schools now have motion picture projectors. All the schools have slide projectors. The department is still in its infancy, but is increasing the scope of its work annually and we hope to convert all the teachers to the belief that moving pictures are an excellent complement to their classroom work.

"A new service which we have installed is the taking of pictures of outstanding events in the various schools. To date, this has been chiefly confined to sports. Last

year we took 40 reels of movies of track meets, foot ball games and other happenings of interest to the pupils."

List of Health Films Available

Since the announcement of the List of Visual Aids in Health and Physical Education in the January issue of THE EDUCATIONAL SCREEN, Mr. Franklin B. Hoar writes that he has received many requests for this list and that reprints are now available. This list was revised and appeared in the April issue of the *Journal of Health and Physical Education,* published by the American Physical Education Association, Box 363, Ann Arbor, Michigan. Reprints may be purchased at a very nominal cost by writing to Mr. Elmer Mitchell, Editor of the Journal.

S. M. P. E. Museum

The Society of Motion Picture Engineers has established in the Los Angeles Museum a collection containing several thousand objects which show the evolution of the motion picture industry.

Among the exhibits represented are: Muybridge with his "Horse in Motion" experiments for Leland Stanford, various models of projectors including Edison, Edison Exhibition Model, Pathe, Amet, Edengraph, Motiograph, Kinema-Kolor.

One exhibit that represents about six years' work is a collection of 1,200 authentic specimens of film made by the pioneers. They vary from four millimeters to four inches in width. There are 200 different color attempts recorded, as well as sound, third dimension, processes, and outstanding pictures, and the first piece of film made on the celluloid supplied by George Eastman to Edison in 1889, and transparent paper used prior to the advent of celluloid.

Round Table at N. U. E. A.

A visual instruction round table was a feature of the 1932 conference of the National University Extension Association, which was held in Minneapolis, Minnesota, May 11-13, 1932. The round table meeting was held at noon on Thursday, May 12, and was well attended. The discussions centered around the problems of visual aid extension service to the schools, as offered by several members of the N. U. E. A. Mr. Ellsworth C. Dent, Secretary of the Bureau of Visual Instruction, University Extension Division, University of Kansas, acted as chairman of the round table. Last year, Mr. Dent was appointed representative of the N. U. E. A. to national visual instruction organizations.

News Briefs from California

MARGARET S. WHITE, Pasadena
MARY CLINT IRION, Los Angeles

The Visual Aids Section of the California Teachers' Association, Southern Section, adopted a program of teacher training as their main objective at their Spring Conference in 1931. The development of the program has been put in the hands of a recently formed committee known as the Committee on Teacher Training of the Visual Aids Section, California Teachers' Association S. S. with Mary Clint Irion of Los Angeles as chairman. The committee decided upon certain preliminary procedures.

A. To ascertain just what is being done in the way of training teachers in this field throughout the United States and in California in particular by writing letters to and interviewing deans of education, presidents of teachers' colleges, etc., asking the following questions:

1. Is any training given in the use of visual aids to your teachers in training or through extension courses to teachers, supervisors, and administrators in service?
2. If so, does this training pertain to the pedagogical application of the various types of aids, or does it refer to the mechanical problems of the use of pictures and other visual aids, or both?
3. If you have any such courses, will you please send us a copy of the syllabus of the course?
4. Do you expect to do anything further than you are now doing in this field?
5. Is it your belief that any further training than teachers in general now have is necessary?

B. To secure the advice and cooperation of the educational leaders close at hand through personal interviews.

C. To submit to the various publications in the field accounts of successful experience in the use of visual tools, and articles of interest regarding the work of the committee.

D. To prepare a bibliography of visual aids for the use of instructors in teacher-training institutions who might wish to inform themselves more fully in this field.

E. To consider the preparation of a handbook on visual aids.

F. If the results of our survey so justify, to present to the State Board of Education a plea for the inclu-

(Concluded on page 145)

DEPARTMENT OF VISUAL INSTRUCTION NOTES

CONDUCTED BY ELLSWORTH C. DENT, SECRETARY

Department to Meet June 27-28 at Atlantic City

THE first meeting of the recently merged Department of Visual Instruction of the N. E. A. and National Academy of Visual Instruction will be held in Atlantic City, New Jersey, on Monday and Tuesday, June 27 and 28. Plans are under way to make this the largest visual instruction meeting ever held in the United States.

The sessions will begin Monday noon with a luncheon meeting, followed by papers and discussions of the topic, "Values of Visual-Sensory Aids by Types and Subjects". Dr. F. Dean McClusky, past president of the Academy, will preside.

The next general session will begin with a luncheon meeting on Tuesday, followed by discussions of the timely topic, "Relating Visual-Sensory Aids to the Curriculum", and a short business meeting.

The sessions have been scheduled so there will be a minimum of conflicts with the general programs of the N. E. A. The sessions of the Department will be open to anyone who may desire to attend but only qualified members will be eligible to participate in the business meeting.

Advance information indicates that the special exhibits to be prepared by the New Jersey Visual Instruction Association will contain many applications of visual aids to classroom procedure and will be of unusual interest to all teachers and school executives who may attend the summer meeting.

A number of special committees have been appointed by Dr. C. F. Hoban, President of the combined Department and Academy and have begun activity. The officials of the Department will appreciate suggestions and will be pleased to assist in solving the instructional problems of those who may request such service.

New Jersey Association Extends Invitation to Department

To the members of the Department of Visual Instruction of the National Education Association combined with the National Academy of Visual Instruction—*GREETINGS*:

The New Jersey Visual Education Association will be glad to meet you and happy to greet you as you come to our spacious shores for your national meeting.

At Atlantic City, "The World's Playground", you will enjoy fun and frolic, and attend inspiring, educational meetings for much has been planned by the enthusiastic educators of our state and other states to make your week pleasant and profitable.

The members of the New Jersey Visual Education Association desire to extend the hand of good fellowship to you at a reception, concerning which definite details will be announced at a later date.

The New Jersey Visual Education Association commends all members of the merged associations on the purposeful use being made of visual aids in the conduct of the classroom. The fact that this meaningful movement is rapidly growing in a national way is ample evidence of the splendid service being rendered by you.

Yours for successful sessions at the Atlantic City Convention.

Sincerely,
GEORGE W. WRIGHT, *President,*
New Jersey Visual Education Association.

Hoban on Summer N. E. A. Program

Dr. C. F. Hoban, Director of museum and visual instruction service for the Commonwealth of Pennsylvania and President of the Department of Visual Instruction of the N. E. A., is to address the General Session of the National Education Association at Atlantic City. Dr. Hoban is to be on the Thursday morning program, June 30, to discuss the subject, "Visual-Sensory Aids in a Progressive Educational Program."

Wide experience in his field, national and international recognition of his achievements, able leadership of the visual instruction program of Pennsylvania and the ability to speak convincingly should certainly qualify Dr. Hoban to present his subject interestingly. President Hale is to be complimented upon her choice for this important mission, as well as upon her recognition of the value of a discussion of visual instruction on the general program.

New Visual Aid Manual

A new booklet, "Simple Directions for Making Inexpensive Visual Aids", is now ready for distribution. It contains all of the material included in the September-March issues of *Visual Instruction News* under

that title, with some revisions and additions to complete the manual.

The purpose of the manual is to provide helpful and timely information concerning many types of visual aids which may be constructed in the classroom or laboratory by either teachers or pupils. The subjects treated include the following:

Etched glass lantern slides
Paper cut-out lantern slides
Ceramic pencil lantern slides
India ink lantern slides
Cellophane lantern slides
Photographic lantern slides
Home made Stillfilms
Film slides
The electric map
Spatter work
Pencil outlines of leaves
Leaf prints from carbon paper
Blue prints
Sepia prints
Sources of materials

The manual should be of interest and of value to all users of visual aids as well as to teachers of geography, the social sciences, history, elementary science, physics, chemistry, agriculture, fine art, industrial art, reading and spelling. It should be of great value, also, to those who may be students in visual instruction classes.

The price of the manual is 25c per copy, postpaid. A discount of 20% is extended to members of the Department of Visual Instruction and to those who desire ten or more copies for class use. Requests should be mailed to the Department of Visual Instruction, 1812 Illinois Street, Lawrence, Kansas.

News Briefs from California

(Concluded from page 143)

sion of training in the uses of visual aids in the courses of study of the teachers' colleges of California.

G. To be prepared to furnish definite help to teacher-training institutions on request.

◆ ◆ ◆

The Automotive Section of the Vocational Educational Association, Southern Section, had an opportunity to see and hear a new three reel sound film, *The New Ford V-8 From a Technical Standpoint* at their meeting May 7, 1932, at the John Muir Technical High School in Pasadena. Mr. H. C. Jump, of the Ford Motor Company in Long Beach, gave a ten minute talk on the importance of using motion picture films in the teaching of automobile mechanics.

◆ ◆ ◆

An editorial committee to collect and forward articles to educational magazines has been appointed for the Visual Aids Section of the California Teachers Association, Southern Section, by Mr. James House, president of that organization. The chairman, Miss Margaret White, of the Pasadena Visual Education Department, plans to select at once a small committee to aid in the work.

◆ ◆ ◆

A recent exhibit of health materials for the use of classroom teachers was held at the offices of the nurses and dental hygienists of the school system in Pasadena. The exhibit included books available through the City Schools Library, all types of visual aids available through the Visual Education Department, and a quantity of free material such as class and personal record charts, mimeographed rhymes with line drawings, etc., which can be used only once.

Through the courtesy of the Crown City Dairy, a large group of attractive and instructive health posters from the Southern California Dairy Council has been given to the Visual Education Department.

The success of the exhibit was proven by the high interest which continues from every school although the exhibit is over.

Membership Application Blank

Office of the Secretary-Treasurer,
Department of Visual Instruction &
National Academy of Visual Instruction,
1812 Illinois Street, Lawrence, Kansas.

Date.....

I herewith make application for ☐ Active ☐ Associate ☐ Institutional ☐ Contributing Membership in the Department of Visual Instruction of the National Education Association, combined with the National Academy of Visual Instruction, covering the period of one year from date.

Check below the preferred date for payment of dues.

☐ Remittance attached ☐ First of next month.
☐ .....

Name .....

Position .....

Street .....

City & State .....

I am ☐ } a member of the National Education
I am not ☐ } Association.

NOTE—Make checks payable to the Department of Visual Instruction.

AMONG THE MAGAZINES AND BOOKS

CONDUCTED BY MARION F. LANPHIER

Science Education (February) "Talking Pictures for Teaching Purposes," by W. W. McSpadden and Charles C. Raines is a welcome contribution to a subject on which little has been written so far. As the authors state, "the purpose of this article is to discuss the equipment necessary and to give such practical advice as has been the result of more than a year's operation of talking pictures in the public schools of Austin, Texas." They advise the construction of an outfit utilizing present equipment for those who have more mechanical ability than funds. "Others can obtain the several units from various sources, assembling the whole with little difficulty, but if expense is not to be considered, a complete outfit may be purchased, with consequent saving in labor."

The various units involved in a 16 mm. sound-on-disc installation are then discussed—the projector, a synchronized turntable, an electrical sound amplifier, a speaker, the motion picture screen—from the standpoint of one desiring to assemble his own outfit.

The Historical Outlook (April) In "Pictures—Their Purpose and Use in the Teaching of History," Frances N. Ahl of the Glendale, California, High School, makes the significant statement that "of all the classroom tools that may be used for the vitalization of history pictures hold a pre-eminent place." She includes all types of pictures—wall pictures, paper prints, stereographs, slides and films. The article presents briefly the purpose of pictures and different methods for their use.

Journal of Education (March 7) "Power Development (Visualization)", appearing in the Character Workshop department conducted by Joseph E. Egan, stresses the importance of evolving a definite technique to develop the definite powers of visualization which a child brings with him to the schoolroom his first day. The writer is firmly convinced that such development would result in the child's ability to learn rapidly, to reason, and to develop a comprehensive memory.

Hygeia (March) "Arrowsmith" is an extended review praising the successful filming of Sinclair Lewis' medical novel of the same name. The production has been given a fine rating by most critics from the general and dramatic viewpoints. Now we find the scientific man's stamp of approval.

Federal Council Bulletin (March) "The Church and The Motion Picture", by A. T. Poffenberger, Professor of Psychology, Columbia University, is an abbreviated account of the author's original discussion of the subject elsewhere. The writer reviews for us again those discouraging aspects of the cinema that have persisted in the given years of this industry. He asserts that the cinema, like the tabloid, aims low. How dreadfully true, this assertion! And the level is little, if any higher, than it was in the early nineteen hundreds. Technically, colossal strides! Spiritually, still marking time! Dr. Poffenberger discusses the Church's place in untangling the situation. His remarks are concise and to the point. But again, one cannot help remembering that such remarks have been as concisely and pointedly made often and often before. Let us hope that the much prophesied day is not too far away when there will be financial means and sufficient ideals among enough picture producers to effect a telling step forward in this matter of better pictures.

Movie Makers (April) "How To Plan a Social Welfare Film", by Arthur L. Gale, and "Film Fights Hay Fever", by Herbert J. Rinkel, M. D. are of interest to teachers and students who make their own amateur films.

National Board of Review Magazine (February) "How the Specialized Motion Picture Is Developed", by Dr. Wallace W. Atwood, President of Clark University, begins with a statement made by Thomas A. Edison to the Countess of Warwick in 1911. The late Mr. Edison hoped to live to see the day when "films will be used to make education more interesting and vivid, and therefore more valuable." The late genius went on to indicate the scope of the film and its ability to draw the world closely together in an intimate experience and relationship. Dr. Clark then discusses the use of the film in the teaching of geography. He explains his method in presenting the life of the Japanese and other peoples. This article is not a long one, but it comprises a surprising amount of suggestive material, and should be of real help to our readers. Dr. Clark succeeds in stimulating the imagination of his readers, so that, although one finds no long discussion of the subject, he does find his thought leaping into a varied array of channels.

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Estimates are given for 3 groups
A—Intelligent Adult
Y—Youth (15-20 years)
C—Child (under 15 years)
Bold faced type means "recommended"

Amateur Daddy (Warner Baxter, Marion Nixon) (Fox) Very human and appealing story with charming romance interest. Genial hero leaves his engineering work to father a pal's four children beset with poverty and evil-intentioned neighbors. Well-acted, convincing and thoroughly worthwhile.
A—**Good** Y—**Very good** C—Mature but good

Beauty and the Boss (Marian Marsh, Warren William) (Warner) Big business man demands of girls only efficiency during office hours but something else afterward. Heroine, at first incredibly innocent and efficient, is transformed by clothes and manages to marry unprincipled boss. Exaggerated and risque.
A—Hardly Y—Unwholesome C—No

Big Timer, The (Ben Lyon, Constance Cummings) (Columbia) Another film of epidemic glorifying prizefighting. Cheap dialog by cheap people, two violent ring fights and a third in business office without gloves. First film with heroine as prizefight manager. Low taste and low ideals throughout.
A—Cheap Y—Doubtful C—No

But Flesh Is Weak (Robert Montgomery, Nora Gregor) (MGM) Sophisticated story of engaging, penniless old aristocrat with great aversion to work, and son just like him, both after wealthy marriage. Smooth acting, novel characters, clever dialog refreshingly free from wisecracking and cheap suggestiveness.
A—**Good of kind** Y—Mature C—No

Careless Lady, The (Joan Bennett, John Boles) (Fox) Artificial plot, mediocre acting, sophisticated dialog. First half spent convincing heroine that innocence is passe and she must get "experience." Second half spent getting it in Paris, with hero chasing her constantly to insure moral ending.
A—Mediocre Y—Unwholesome C—No

Cohens and Kellys in Hollywood (Sidney, Murray) (Universal) Agreeable foolery by the old comedy pair, free from slapstick and vulgarity of their former pictures. Real human interest story which travesties amusingly Hollywood production methods and the ups and downs of movie prosperity.
A—Fair Y—**Amusing** C—**Amusing**

Destry Rides Again (Tom Mix, Claudia Dell) (Universal) Typical Tom Mix and Tony western with fine riding, clever gun-play and beautiful scenery. Artificial story of good hero blind to obvious treachery of partner, but gets revenge and girl. Acting crude except by horse but action thoroughly thrilling.
A—Hardly Y—**Good of kind** C—Probably good

Explorers of the World (Medley of exploration films) (Raspin) In novel manner, several famous explorers show pictures of their travels in all corners of the earth, with their own vocal explanations. Some faking, but much extraordinary photography, extremely interesting and varied subject-matter, ably and effectively presented. Stimulating and valuable.
A—**Interesting** Y—**Very interesting** C—**Good**

Gay Caballero, The (George O'Brien, Victor McLaglen) (Fox) Lively western, with rather good plot on Robin Hood motif, fast and furious action. American pals pose successively as well-known bandit to help Mexicans and each other. Fine settings and photography. Violent excitement only objection for children.
A—**Good of kind** Y—Rather good C—Exciting

Good Sport (Linda Watkins, John Boles) (Fox) Another infidelity comedy exploiting gold-digger life—about unsophisticated wife whose husband takes a little jaunt to Paris with mistress. Said wife meanwhile mingles with hubby's gay feminine friends, learns much, and achieves solution.
A—Hardly Y—Certainly not C—No

Grand Hotel (Extraordinary cast) (MGM) A masterpiece of its kind, outstanding in almost every way. Shows varied mosaic of life, its good and evil, joy and sorrow, success and failure, with great hotel lobby as main setting. Strong, finely acted, skillfully directed version of the novel.
A—**Notable** Y—Unwholesome C—No

It's Tough to be Famous (Doug Fairbanks Jr.) (First National) Exaggerated satirical farce about trials of genuinely modest hero forced to endure high-pressure publicity stunts which almost ruin happiness and home. Young Doug does some excellent work in rather subtle sole. Rest of acting obvious or mediocre.
A—Passable Y—**Amusing** C—**Good**

Miracle Man, The (Chester Morris, Sidney Fox) (Paramount) Opens with smooth gang of crooks at work in city. Chance sends them to country town where they try to exploit local faith-healer. His true goodness and religion triumph over them quite convincingly. Some very effective acting but too much Chester Morris.
A—**Good** Y—Fairly good C—Hardly

Misleading Lady, The (Claudette Colbert, Edmund Lowe) (Paramount) Light romantic comedy revamped from old stage play. Rich, bored society heroine sets out to win hero, who is at first indifferent to her, then adopts caveman tactics, and both fall genuinely in love at the end. Amusing minor-role of lunatic.
A—Light Y—Better not C—Unsuitable

Mouthpiece, The (Warren William, Sidney Fox) (Warner) Able, smooth philandering lawyer leaves honest law practice for greater wealth as gangland's legal defender. Innocent heroine's charm moves him to quit the dirty business and defy gangsters, but they "get" him. William's work exceptionally fine.
A—**Good of kind** Y—Doubtful C—No

Office Girl (English production) (RKO) Genuine light comedy, refreshingly different from Hollywood formulas. Quaint, leisurely, very human, engagingly acted, with some distinctly original touches for humorous effect. Renate Muller is a heroine of notable ability and charm.
A—**Entertaining** Y—**Very good** C—**Good**

Play Girl (Loretta Young, Norman Foster) (First National) Story of shop-girl life, very human in spots, but cheapened by Winnie Lightner's brazen, risque dialog and distorting ordinary ideals. Shows love and marriage as successful with lying and race-track gambling as the foundation.
A—Cheap Y—Doubtful C—No

Police Court (H. B. Walthall, Leon Janney) (Monogram) Second rate picture with serious intent. Human-interest story of devoted little son of drunken father who was formerly great actor. Slow-moving action and mawkish sentiment at times. Well-acted but more depressing than entertaining.
A—Mediocre Y—Perhaps C—Unsuitable

Scandal for Sale (Charles Bickford) (Universal) Another hectic newspaper film. This time hard-boiled tabloid-editor hero is unscrupulous enough to let his own child die, nearly lose his fine wife, and send his best friend to death on transatlantic flight—all for "circulation." Slightly overdrawn.
A—Depends on taste Y—Hardly C—No

Sky Bride (Richard Arlen, Jack Oakie) (Paramount) Just another air-picture that strains after thrills and rather mawkish sentiment. Hero can recover his lost nerve only by punching his devoted pal unconscious at intervals. Acting depressingly ordinary. Child dangling in midair under plane is the "big moment."
A—Worthless Y—Mediocre C—No

So Big (Barbara Stanwyck) (Columbia) Fine screening of famous Ferber story of triumph of a woman's idealism and courage over hardships. Minor faults in make-up and in one or two acting roles, but most of cast is excellent and Miss Stanwyck's performance is notably fine.
A—**Very good** Y—**Very good** C—**Good**

Steady Company (June Clyde, Norman Foster) (Universal) Rather wholesome little prizefight picture, with two overlong and violent ring fights, otherwise showing human and humorous romance of fine little telephone girl and young truck-driver with "champ" ambitions, his best chance for success in life.
A—Hardly Y—Passable C—Hardly

Symphony of Six Million (Irene Dunne, Ricardo Cortez) (RKO) Strong, human picture of lower east side New York life. Son of humble home rises to medical fame, moves uptown to rich practice, but old home section and its crying need draw him back. Splendidly acted by whole cast.
A—**Very good** Y—**Very good** C—**Mature but good**

Tarzan the Ape Man (Johnny Weismuller) (MGM) Most fantastic, sensational thriller yet made. Striking African scenery and animal photography. A masterpiece of technique, trick shots and effects perfectly done. Ignores probability and scientific truth to get maximum thrills. Unusual and interesting.
A—**Notable** Y—Thrilling C—Doubtful

This Is The Night (Lily Damita, Roland Young) (Paramount) Light, flippantly sophisticated farce-comedy about bachelor in love with a wife whose husband returns suddenly, etc., etc. Stale and feeble plot hampers the splendid comic skill of Roland Young and Charles Ruggles, the only redeeming features.
A—Hardly Y—Doubtful C—No

Wet Parade, The (All Star cast) (MGM) Serious picturization of liquor question, pre- and post-prohibition drunkenness, the saloon and the speak-easy, the farce of prohibition enforcement, and the comedy and tragedy of it all. Finely acted. Will stir a lot of public thought pro and con prohibition.
A—Better see it Y—Doubtful C—No

World and the Flesh (George Bancroft) (Paramount) A wild tale of Russia a la Hollywood, with the Russian Revolution as background, with its accompanying immorality and bloodshed. Disorder and upheaval at every turn. Excellent acting by principals. Plot and action more or less incredible.
A—**Good of kind** Y—Unwholesome C—No

Young America (Tommy Conlon, Raymond Borzage) (Fox) Excellent juvenile, fine supporting cast, very human juvenile-court story make an appealing, thought-provoking picture of real social value. Interesting to all, but parts may be too sad for sensitive children. Except for one or two falsities in motive and action, a great picture.
A—**Excellent** Y—**Excellent** C—**Mature but good**

THE CHURCH FIELD

CONDUCTED BY R. F. H. JOHNSON

Motion Picture Cameras for Church Use This Summer

This is the time of year when it is particularly fitting to discuss the matter of cameras for church movie purposes. For one thing, we are approaching the time when Sunday School picnics and the like will soon be abroad in the land. And a Sunday School picnic is always an ideal subject for the amateur movie photographer. If it is announced that movies are to be made at a picnic, you are sure to have a larger crowd than usual, and then again when the pictures are shown later on you will have a crowded house to see the movies. The movie-making feature at a picnic is always productive of rare fun. All of us like to "be in the movies" even if we are not Hollywood actors. Be sure to take a motion picture camera along on the occasion of your next Sunday School picnic and see what fun everyone gets out of it.

Of course, there is practically only one sort of movie camera for such purposes, and that is the 16 mm. amateur camera. You could use a hand-held semi-professional camera employing 35 mm. film, but the expense of the film would be entirely too great. It is estimated that the cost of 35 mm. film for making any given picture is about six times that of 16 mm. film and there is very little reason for using 35 mm. film for picnics and similar functions. If your 16 mm. camera is equipped for using Kodacolor, you can get some nice effects by taking colored motion pictures. You probably would not want to take all of your movies at the picnic in color, but you could take some of them in this fashion, and this would add variety when you come to project the picnic pictures.

Here is another thing that has to do with making motion pictures this summer. Almost every congregation has several owners of 16 mm. movie cameras among its members. Why not ask these people to be sure to take their cameras along this summer on their vacations and bring back pictures of their travels and vacation experiences which they could show at a meeting of some one or other of the church organizations in the autumn? You will find that such a meeting will be a very interesting event and one which will bring a fine attendance. If the Sunday School has a ball team, be sure to make movies of some of the games, and you will find that the lads on the team will be mighty proud of their prowess as recorded by the camera and will want their older friends to be sure to see the movies.

As a matter of fact, every clergyman, or at least every church, ought to have a 16 mm. motion picture camera nowadays, for there are so many things happening all the time of vital interest to the church and congregation that should be recorded by motion pictures. It is generally possible to repay the cost of a camera in a comparatively short time by putting on motion picture entertainments and charging a small admission. These entertainments need not be given over entirely to home-made pictures, but a portion of the pictures shown should be made by local persons and relate to local scenes. Other interesting films can be secured on loan from film libraries at a very reasonable price and frequently can be secured on a free rental basis. By a judicious combination of local films and films secured from various other sources, very interesting motion picture entertainments can be put on, and the resulting admission charges will soon defray the expense of a camera.

St. Joseph Valley Larger Parish Completes Film Story

A recent issue of the South Bend, Ind., *News-Times* carried a two-column article on the remarkable work of Rev. R. W. Leisher, Centerville, Michigan, in staging a come-back in rural church units in the St. Joseph Valley Larger Parish in southwestern Michigan. The fact that the many and varied parish activities were being recorded with a Filmo 16 mm. movie camera was mentioned some time ago in this department. With regard to this parish film, the South Bend paper has the following to say:

"Without doubt the recording of these (parish) activities last year on motion picture film was the 'big event' of the year. Two sets of machines are kept busy a good part of the time, cameras and projectors. The parish has its own newsreel service, and pictures of the big football games and other important events in reasonable reach are covered by the parish cameraman.

"Work on the film, *A Michigan Miracle,* has just been completed by Mr. Leisher. The 8-reel film begins with Isaac McCoy's establishment of the Carey Mission in Niles 112 years ago, and the scenes that follow revive the story of the religious, educational,

(*Concluded on page* 158)

Visual Instruction in Indiana

(*Concluded from page* 140)

the school can not purchase the necessary films and slides they should be made available for rental. In Indiana the State University Service has aided materially by purchasing available materials and offering the subjects to schools on a rental basis. Individuals who have introduced a worthwhile visual program in their respective schools have done much to pave the way for other schools. To those who have taken this first step goes the responsibility of making the visual program a success. Members of this group should be able to disseminate information concerning correct procedure in establishing a visual program and minimum standards consistent with available funds. This could be accomplished through a state-wide organization. Such an organization would familiarize teachers with the newer visual materials and pave the way for a uniform visual program throughout the state.

Film Production Notes

(*Concluded from page* 141)

New Agriculture Films

Preparation and Marketing of Dressed Poultry, Inspection and Canning of Poultry, and *Marketing Live Poultry,* are the subjects of three new poultry films sponsored by the Bureau of Agricultural Economics.

These films were shown at the World Poultry Congress, London, England, as a single 5 reel subject entitled, *The Poultry Marketing Industry in the United States.* For distribution in the United States the same material has been made into three distinct films, which may be shown together or separately.

Agricultural Explorations in Ceylon, Sumatra and Java, a 2-reel silent film, sponsored by the Bureau of Plant Industry, shows in their native surroundings some of the little-known and interesting fruits and ornamental plants which are now growing in this country as the result of the work of agricultural explorers, who visit out-of-the-way places in search of plants for introduction and trial in America. This film is of general interest and should prove valuable, the department believes, in acquainting the public with new fruits and vegetables that may appear on American markets in the near or distant future. It should be of special interest to college and high school students because it offers information about little-known subjects and regions.

The reason for the Federal seed act and means used to keep out bad seed are shown in the 2-reel motion picture *How the Federal Inspection of Imported Seed Protects the Farmer,* also sponsored by the Bureau of Plant Industry. This film belongs to that group of educational films that illustrate government activities. This particular film shows how the farmer is protected from loss resulting from poor seed and foreign weeds. It is of interest to farmers, importers of seed and the public generally.

Prospective borrowers of any or of all of these films should apply to the Office of Motion Pictures, Extension Service, U. S. Department of Agriculture.

Scenic and Travel Library

Ideal Pictures in New York City, of which M. J. Kandel is president, have a library of travel and scenic films, accompanied by descriptive talk.

Among their subjects are: *The Land of Islam,* depicting in detail the life of natives in Morocco; *The Menace of Guatemala,* which takes the audience through a town in the menacing shadow of the great active volcano, Agua, and shows some interesting native Indian types; and *When Winter Comes,* a beautiful picturization of the white glory of winter, including some sequences of animals making ready for zero temperatures.

Do You Know Your Tools?

Photography is without doubt the most useful tool of the Visual Educator.

Can you use this valuable medium properly, efficiently, artistically?

The CAMERA CRAFT BOOK SERVICE can supply authoritative texts on any photographic subject. The CAMERA CRAFT magazine brings you the latest news and instructive articles.

Write for our free catalog giving a complete list of photographic books and a sample copy of Camera Craft Magazine

Camera Craft Publishing Company

703 Market Street - - San Francisco, California

SCHOOL DEPARTMENT

CONDUCTED BY DR. F. DEAN McCLUSKY

Director, Scarborough School, Scarborough-on-Hudson, N. Y.

A Picture Study Lesson With the Opaque Projector

IRMA H. PIGORSZ

THE OPAQUE projector is a great aid to me in my classwork. The following picture study lesson recently given to my 1A class illustrates its use. During this lesson, a picture, which had been studied the previous semester, was reviewed and a new one presented for study and appreciation. The procedure of the lesson is briefly recorded below:

"The first picture you are to see today is one you have already seen and studied. Let me see how much you remember about this picture."

Picture 1

"What is the name of this picture?"

Esther: "The Madonna of the Chair."

"Can you tell me another name for Madonna?"

George: "A Madonna is a mother."

"Who are the people in this picture?"

Sara Jane: "Jesus, Mary, and John."

"A Madonna, then, is the mother of Jesus."

"Why is the picture called "The Madonna of the *Chair.*"

Jack (running up to the curtain): "Here is the chair back here and the mother is sitting in it."

"Why is the picture round?"

Irene: "It was made on the top of a barrel."

"Tell the story about this picture."

Marilyn: "The man who made this picture was out walking in the country, one day. He saw a mother and two children sitting under a tree. He thought they looked so nice that he wanted to paint them. He looked around for something to draw on and all he could find was an old barrel top. That's why the picture is round."

"So many of the lines are curved in this round picture. Do you see any curved lines in the picture?"

Barbara: "The scarf around mother's head is round."

James: "Mother's arms are round at the elbows."

Donald: "The baby's face is fat and round."

Joseph: "Baby's arms and legs are curved."

John: "Mother even had to bend her head to get into this round picture."

"Does anyone remember who painted this picture?"

Helen: "It was an Italian."

"Yes, it was an Italian. His name was Raphael. Let's all say his name. Raphael lived long, long ago. Tell us the name of this picture again."

Barbara: "The Madonna of the Chair."

"The next picture you will see is a new one. I hope you will learn to like it as much as I do. It has always been a favorite of mine."

Picture 2

"This picture is called "Feeding Her Birds." It was painted by a Frenchman whose name was Millet. Say his name with me. Millet liked to paint pictures of country life better than anything else. Of all the pictures he made he liked this picture of the mother and her three children the best. They reminded him of a mother bird and her little birds. This mother is feeding her three little children just as a mother bird feeds her birdies. She has lined up her two little girls and their baby brother on the doorstep, and she sits in front of them on a little stool. In her lap she holds a bowl of porridge and feeds it to the children with a big spoon. Who do you think is going to get the first spoonful of porridge?"

Barbara: "I think the little brother in the middle is going to get the first taste because he's got his mouth open."

Ivy: "He looks just like a baby bird with his mouth open. Maybe that's why the picture is called "Feeding Her Birds".

"You are right, Ivy. That is just exactly why Millet gave his picture that name."

"Do you think the little sisters mind very much that their little brother gets his dinner first? Do they love their little brother? What makes you think so?"

Loretta: "One little sister is smiling at him."

Lorraine: "The other one is watching her brother."

"What kind of shoes do these little children wear?"

Frank: "They have wooden shoes on."

"Count the wooden shoes for us."

Jean: "There are six wooden shoes."

"How many little white caps do you see?"

Jean: "Three."

"That is the way the peasant or country children

dressed in France at the time when this painter lived. Mother, too, wears a little cap on her head. Her skirt is long and full. So are the dresses of the little girls.

"In back of the house is a garden. Father is busy working in it. Raymond, run up and look closely to see what father is doing in the garden."

Raymond: "He is digging in the garden. From the back of the room I thought that was a flower."

"Here comes a hen running from the garden. I wonder what she is coming for."

James: "She wants something to eat. Maybe she thinks there will be some crumbs left over."

"What kind of a day do you think it was when this picture was made?"

Irene: "It was a sunny day."

"What, in the picture, tells you it was a bright day?"

Sara Jane: "There are shadows on the wall."

Jean: "The sunshine makes mother's hair so bright."

Loretta: "The baby's hair is just like his mother's."

"Tell again the name of the picture."

James: "Feeding Her Birds."

"You surely ought to be able to remember that name because you can read all the words at the bottom of the picture. Let us say the name of this Frenchman again."

All: "Millet."

By using the opaque projector in this study, the pictures were greatly enlarged and it was possible to notice the smallest details in each. The colors also showed up very clearly on the screen. The children enjoy this way of studying their pictures.

Open House at Boston University

On April 21, 22 and 23, Boston University School of Education held Open House, during which all courses were open to visitors. The "Visual Education" period was divided into two parts, the first being devoted to the discussion of "Sound motion pictures in public schools", with the demonstration of sound projectors, and the second part devoted to "Slides made by Pupils and Teachers."

Dean Arthur H. Wilde of the School of Education foresees a demand for Directors of Visual Education, and has authorized the arrangement of a curriculum which will adequately and specially prepare teachers for such positions.

◆ ◆ ◆

A two-hour credit course, "Visual Instruction in Elementary and Secondary Schools," is on the 1932 Summer Session program at the University of Kansas. The course will be elementary, including both lecture and laboratory periods.

Educational Lantern Slides

Accurately Graded
Photographically Perfect

U. S. HISTORY
First Through Eighth Years

NATURE STUDY
First Six Years

ART APPRECIATION
Elementary and Junior High

GEOGRAPHY DRILL MAPS
Fourth Through Eighth Years

We also carry a full line of projection apparatus, screens and accessories. Send for Catalogue.

Your correspondence invited

Eye Gate House, Inc.
330 West 42nd Street New York, N. Y.

TRANS-LUX **TRANS-LUX**

"LITTLE WONDER"

Combination Air-Cooled

Opaque and Stereopticon Projector

Brings all worthwhile current data, publications, post cards and other illustrative material to hand for immediate use.

You can also use stereopticon slides.

Air-cooling device consists of suction blower drawing cool air over projected opaque material,—protecting material and hands of operator.

See article this publication under "Among the Producers."

Write for literature.

Trans-Lux Daylight Picture Screen Corporation

247 PARK AVENUE NEW YORK CITY

Sound Picture and Program Distribution System of the Port Chester High School

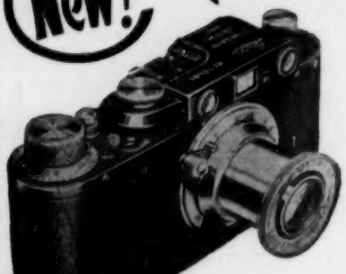
The Port Chester High School (N. Y.), recently completed, is the last word in modern design and modern equipment. There are separate gymnasiums for boys and girls; a special "corrective" gymnasium for the purpose of helping to correct physical defects; a cafeteria in the basement which serves lunch at cost; and an auditorium which will accommodate the entire student body.

One of the most interesting features of the school's up-to-date equipment is the unified sound system. Realizing the growing need for complete and flexible facilities for sound reproduction, the School Board, in collaboration with its architects, and Electrical Research Products, Inc., laid out one of the most comprehensive sound systems ever installed in a school. It comprises: Sound Pictures; Announcing System; Radio Program Distribution System; Non-Synchronous Reproduction System.

Two amplifying channels are installed, so that any two programs can be reproduced simultaneously in different rooms, thus affording great flexibility.

Built-In Range Finder
with Automatic Focusing
More Accurate Than Ground Glass Focusing

New!



THE NEW MODEL D
Leica
The Universal Camera

See Your Picture in Exact Focus Right Up to the Moment of Exposure!

No more guesswork in focusing—no more blurred pictures. Simply sight your subject through built-in range finder, turn lever attached to lens until your view is sharp and clear, then snap! Faster, more convenient than any other focusing camera. Even speed pictures caught instantly with perfect focus.

7 Interchangeable Lenses

LEICA is the most economical camera for educational work. Only pocket-size, yet instantly convertible into speed camera, portrait camera, telephoto camera, copying camera, micro camera, clinical camera, and many more. Efficient in and out of doors. New fast f:1.9 lens now makes night pictures possible too. Takes up to 36 pictures on a single roll of standard cinema film. **Enlargements** up to 12x18" are marvelously sharp and clear. Used and endorsed by foremost educators.

Write for Free Illustrated Booklet "The New Model D LEICA"

LEICA Focusing Copy Attachment

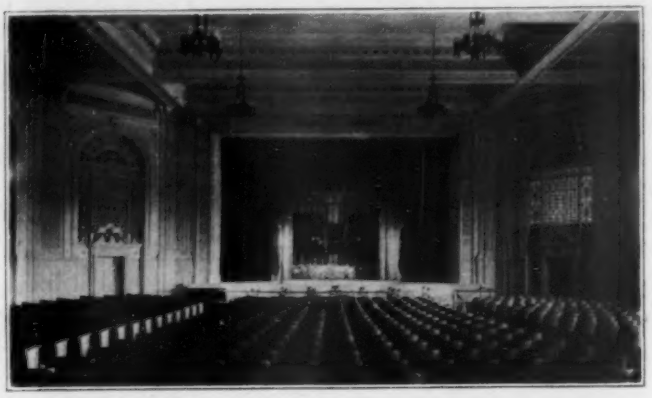
makes LEICA the ideal copying camera for schools

With this attachment you can make copies of maps, drawings, letters, books, micrographs, etc., quickly and easily. Any subject from ¼" diameter up to any size can be photographed. LEICA Negatives will give you clear enlargements up to 12x18 inches.

E. LEITZ, Inc. Dept. 107, 60 East 10th St., New York

Centralized System Control

For convenience in their use, the amplifiers and control equipment are located in the principal's office, thus



Screen Is Raised To Show Horn Used in Assembly Hall

making it easy for the principal or others to supervise its use. At this point, the loud speaker circuits from all over the building terminate on an output control panel so that, by means of key switches, the loud speakers in any desired location can be connected. Likewise, all input circuits terminate on a panel so arranged that input to the amplifiers can be obtained from any desired point. Since two amplifier channels are available, it is possible to distribute any two programs simultaneously to two groups of listeners.

Radio Program Distribution System

Two Western Electric 10-A Radio Receivers permit the simultaneous reception of two different programs. A class in history can, therefore, be listening to a broadcast program of historical interest at the same time that a class in music is listening to an instructive musical program.

Sound Picture Equipment

The large auditorium, or assembly hall, is so equipped that it can be used for the showing of talking motion pictures. A standard Western Electric Sound System, such as is used in the larger theatres, is installed in the projection room. The screen and the horns are also of the usual theatrical type. The projection room itself, is so well designed that it could serve as a model installation. Two motion picture projectors are installed so that a program can be run continuously. As only one of the amplifying channels is required for sound pictures, the second is available simultaneously for other uses.

Announcing System

Another valuable use of the equipment is its application for announcing purposes. In this capacity, it is a great convenience since it permits an announcement

to be made throughout any desired part or all of the building when, for any reason, it may not be desired to assemble the student body in the auditorium. Announcements can, of course, be made through the microphone in the principal's office or through microphones plugged into any of the other outlets, as desired. Should it be required at any time to distribute to other locations lectures or programs being given on the auditorium stage, use can be made of the stage microphone outlet.

The Announcing System should prove of great value in times of emergency. While the volume of sound from the individual loud speakers can be controlled locally in the room to suit the needs of the classes, there is no "Off" position on the panel, thus insuring that the entire system is ready for instantaneous service in emergencies when a timely warning may be of extreme importance.

Music Reproduction System

On many occasions it is desirable to provide music in the classrooms, auditorium, gymnasium, cafeteria, or other rooms. To meet this need, a portable Electric Music Reproducer is used. It is mounted on a small rubber-tired truck which can be wheeled where needed and plugged into any of the input circuits leading to the control room. The amplified music can then be distributed to any desired points. Some rooms in which the music reproducer is frequently needed have both input and output circuits to the control room, so that the portable music reproducer can be used in the same room in which the music is to be heard. This is a great convenience inasmuch as records can be played, parts repeated, and volume controlled without

Let Us Bid or Estimate On Your VISUAL AID NEEDS

YOUR BUDGET for VISUAL AIDS will go much farther when you purchase your material from us:

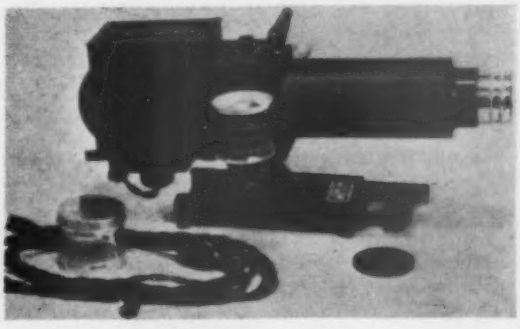
Motion Picture Films — Glass Slides—Filmslides
35 mm. and 16 mm. Widths — Sets for Every Subject
Stereopticons, Cameras, Projectors, Screens, And All Accessories

Talking Picture Equipment and Special Attachments. Write for Catalogs and quotations.

If your material is obtained through competitive bidding, please include us in your bidders' list.

HERMAN ROSS ENTERPRISES INC.
622-30 NINTH AVE. NEW YORK
TELEPHONE LACKAWANNA 0351

SAVE MONEY
on Your Projection Equipment
Equip your schools with
STILLOPTICONS
Priced to fit your budget



500 watt pre-focused lamp base, highest quality double convex condensing lenses (4¼" diameter), 2½" x 10" focal length objectives, 15 foot detachable cord, tilting device, receptable for glass slide and stillfilm carriers, slide carrier; highest quality metal stock and electrical equipment used throughout.

Price $45.00
(f. o. b. Los Angeles, Calif.)
Results Guaranteed
WHY PAY MORE?

STILLFILM, INC. 4701-4705 W. Pico Blvd. Los Angeles, Calif.

the necessity for making adjustments in the control room.

The school is frequently visited by educators interested in observing up-to-date methods and also by

Music Reproducer in Use in Gymnasium Class

committees gathering data for guidance in the designing of schools. To these visitors the flexibility, convenience and general usefulness of the sound system will readily be apparent, as well as the new avenue for education, which is by no means a minor factor. It is being recognized more and more that a complete sound system is an indispensable feature of the modern school.

Summer Courses in Visual Instruction

Dr. Joseph J. Weber, Department of Education & Psychology, Valparaiso University, Valparaiso, Indiana, will give a course in Visual Instruction at the University of Texas, Austin, Texas, during the first Summer Session. This will be for a period of six weeks.

◆ ◆ ◆

Special courses in Visual Instruction will be offered by the State Teachers College at Terre Haute, Indiana, during the first and second summer terms, under the direction of H. A. Henderson of Indianapolis. Titles of these courses are, "Visual Instruction as Applied to the First Six Grades," and "Visual Instruction as Applied to the Junior and Senior High School."

◆ ◆ ◆

Mr. George A. Stracke, who has been appointed to take charge of the visual work at the University of Arizona, will conduct a course this summer on "Visual Education—Methods and Materials." Mr. Stracke is planning an exhibit of visual education material in connection with the teacher-training work of the University. Firms who wish to place their visual aids in this exhibit may communicate with him in care of the Department of Agricultural Education.

The Bicentennial Pageant of George Washington

THE ARTISTS

Arthur William Heintzelman
Robert Nisbet
Sears Gallagher
Earl Horter
William Auerbach-Levy
Ernest David Roth
Eugene Higgins
Ralph Boyer
Allen Lewis
Levon West
George Wright
Kerr Eby
F. Luis More
Albert Sterner
Samuel Chamberlain
Louis Conrad Rosenberg
John W. Winkler
Robert Lawson
Walter Tittle
Childe Hassam

AN INVALUABLE visual aid for teaching the life of George Washington has been created by twenty of America's most famous artists, assisted by a group of distinguished educators to insure historical accuracy. The Pageant consists of twenty original etchings depicting memorable scenes in Washington's life, from his boyhood at the Rappahannock River home to the close of his illustrious career at Mount Vernon. Each is an historical reconstruction, accurate in every detail, and representative of the finest work done in etching by contemporary American artists.

Dr. Daniel C. Knowlton has prepared a comprehensive and practical thirty-page TEACHERS' MANUAL, analyzing the historical content and teaching values of each of the twenty prints, and including specimen lessons for the Elementary, Junior and Senior High School levels.

This indispensable Washington material, consisting of the twenty etchings, skillfully reproduced in half tone, and including the TEACHERS' MANUAL, is now available at the nominal price of $7.50 net, delivery prepaid. Lantern slides made from the original etchings may also be obtained at $20.00 net per set, prepaid. Orders will be filled immediately or a descriptive circular sent upon request.

THE ADVISORY BOARD

Dixon Ryan Fox, Columbia University, Chairman
Matthew Page Andrews
Harry M. Ayres
H. E. Bolton
William E. Dodd
Ralph H. Gabriel
J. Montgomery Gambrill
Daniel C. Knowlton
John A. Krout
William B. Munro
Victor Hugo Paltsits
Arthur M. Schlesinger
F. E. Spaulding
N. W. Stephenson
Ashley H. Thorndike

EDITOR
John Taylor Arms
President, Society of American Etchers

ASSOCIATE EDITOR
Harry A. Ogden

The George Washington Memorial Association
386 Fourth Ave., New York, N. Y.

Your Guide to the Biggest and Best in Current Motion Pictures!

Write today for free non-theatrical Catalog 78.

NON-THEATRICAL DEPARTMENT

UNIVERSAL PICTURES CORPORATION

(CARL LAEMMLE, Pres.)

730 Fifth Ave.
New York City

READY NOW

Evolution Made Plain in Clarence Darrow's "MYSTERY OF LIFE"

7 Reels

Write for Information

The Keystone Visual Readers Make Good

One User Writes:

"I believe it is the most simple and effective approach to beginning reading. Here, lowest ability groups are doing almost the standard work for highest ability groups."

Reporting on the Results of a Controlled Experiment with High Ability Groups, Another Writes:

"Consistently throughout the semester the Visual Group scored higher than did the . . . . . The Visual averaged 20.3% higher during the semester, and finished on the 204 word vocabulary test with 18.4% more words than did the . . . . . Group."

Reporting on Use with Special Groups, Another Writes:

"In some cases the gains were very considerable, the child gaining four terms of reading ability where normally he would have been expected to gain only one term."

The Keystone Visual Readers, with Accompanying Stereographs and Lantern Slides, Are a Specific Application of Visual Aids to a Definite Educational Problem.

That's Why the Above Testimonials Are Specific, Positive, and Convincing.

The Visual Aid Approach to Reading Is the Biggest Opportunity for the **Convincing Use of Visual Aids** Yet Offered to Education by the Keystone View Company.

Let Us Send You More Testimonials and Complete Information.

Keystone View Company

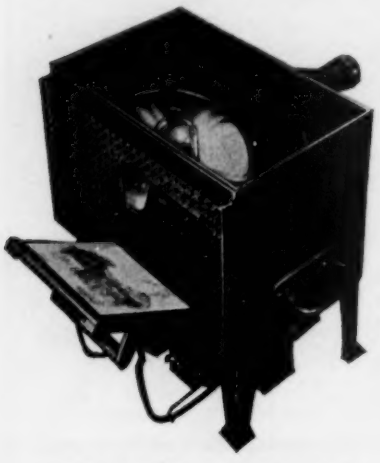
Meadville, Penna.

AMONG THE PRODUCERS

Where the commercial firms — whose activities have an important bearing on progress in the visual field — are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necessary space limitations, such material as seems to have most informational and news value to our readers.

"Little Wonder" Combination Projector

The Trans-Lux Daylight Picture Screen Corporation has a very practicable combination air-cooled opaque and stereopticon projector known as the "Little Wonder", made especially for use in the individual classroom with a Trans-Lux Screen.



Combination Opaque and Stereopticon Projector

The air-cooling device consists of a suction blower drawing cool air over the projected opaque material. It not only protects the material, but keeps the back of the projector so cool that the operator does not burn his hands.

It is portable, — in that it weighs only 28 lbs., and has handles at the side. This adds considerably to its portability. It can be placed in the back of a car, along with the screen on the frame, and taken from school to school.

It uses one (1) prefocal base 500 Watt lamp,—no adjustment is necessary. The stereopticon attachment has a cone shape lens holder which drops into a groove,—no adjustment necessary. This can be removed and a strip film attachment be inserted in its place. The projector is very compact, and very simple to operate.

Opaque material is available for projection from books and magazines, post cards, sketches, objects, and even test questions can be presented in this manner.

The Educational Department of The Trans-Lux Daylight Picture Screen Corporation, New York City, will be very pleased to send descriptive literature.

Metropolitan Motion Picture Company Extends Activities

The Metropolitan Motion Picture Company of Detroit, Michigan, producers of RCA Photophone industrial sound pictures, announces its association with the Atlas Educational Film Company of Chicago, The Alpha Motion Picture Corporation of Cleveland and the Aeolian Company of Missouri, located in St. Louis.

The association extends the activities of the Metropolitan Company in the middle west and at the same time makes available to industrial organizations in these territories the finest of RCA Photophone sound recording equipment. This company is the oldest organization in Detroit engaged in the production of industrial motion pictures. The extension of its activities into the Chicago, St. Louis and Cleveland territories marks another step in the continued progress of the company over a period of fifteen years.

The Alpha Motion Picture Corporation is an outgrowth of the Argus Company in Cleveland. For the past ten years, they have made available a specialized motion picture service to industrial concerns in and around Cleveland. The Aeolian Company of Missouri was established in St. Louis twenty-five years ago. As early as 1910 they distributed the products of the Victor Talking Machine Company and later those of the RCA Victor Company, Inc. The Atlas Educational Film Company has been one of the outstanding producers of industrial and educational motion pictures in Chicago since 1913.

Under the terms of the agreement, each company retains its separate ownership and identity, but cooperate on sales and production.

New Leica Camera Has Automatic Focusing Control

A new model Leica with built-in-range finder and automatic focusing lens is the latest revolutionary development to be introduced by E. Leitz, Inc., New York City. The range finder, previously a separate instrument, is now built into the camera itself and by an ingenious connection of the finest precision this range finder is actuated by the helical focusing mount of the lens. When taking a picture the subject is sighted through the range finder eyepiece, situated immediately to the left of the view-finder opening at the rear of the camera. Two images of the subject will be seen, and as the mount of the lens is turned the images will appear to separate or approach coin-

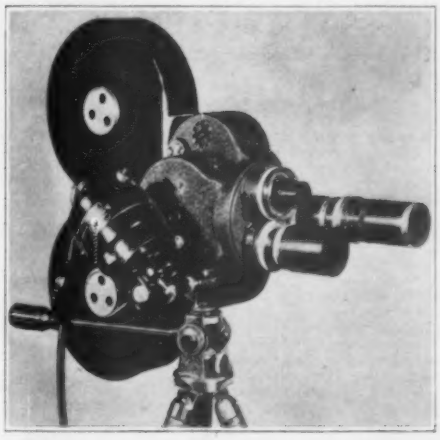
cidence. When coincidence is established the lens is automatically in focus. The release then is pressed with every assurance of getting a perfectly sharp picture.

In appearance the new camera, known as Leica Model D, does not differ greatly from the previous models. The range-finding mechanism is contained in a black metal housing on top of the camera, extending from the shutter dial to the rewind knob. The view-finder retains its position and from the front is flanked by the two small openings for the range-finder. The dimensions of the Leica are unchanged, and there is no appreciable increase in weight.

Portable Movie Camera with Electric Motor

To meet special demands for airplane motion picture work and for outfitting scientific and exploring expeditions, the Bell & Howell Company has arranged to equip its portable 35 mm. Eyemo movie camera with an electric motor. Also an external film magazine carrying 400 feet of film can be added. In airplane photography the motor feature is particularly desirable in that the pilot can place the camera with attached motor in an advantageous position and shoot pictures by remote control.

Any Eyemo camera employing a hand crank can be motor equipped. The motor is mounted on one side of the camera, engaging in the hand crank socket. The motor runs the film through at speeds of from 24 frames down to 4 frames per second, the speed being adjusted by the camera governor. The motor weighs only 3⅞ pounds, and the camera 8½ pounds.



Eyemo Movie Camera with Attached Motor

When an external film magazine is not attached, the film is run from a 100 foot spool in the camera itself, as formerly. If desired the motor runs the entire 100 feet of film through without stopping.

Either a 12 or 110-volt motor can be adapted to the camera. The 12 volt motor is particularly practical for airplane work as this current is available from the plane batteries. Current for the 12-volt motor can also be supplied by auto batteries on exploring expeditions.

NEW HISTORY UNITS

Glass & Film Slides

U. S. History—20 units
Ancient & Medieval History—12 units

Replete with Maps

Write for bulletins describing this most up-to-date teaching material.

C. W. BRIGGS COMPANY
628 CALLOWHILL ST., PHILADELPHIA, PENNA.

"America's Oldest Producer of Educational Projection Slides"

The motor is readily attached to the camera and just as readily detached. When it is not desired to use the motor, the camera can be operated by spring drive while held in the hand—the usual manner of operation—or it can be set on a tripod and operated by hand crank. Thus a high degree of utility and flexibility is combined in a unit of surprisingly small weight.

International Film Foundation Formed

The International Film Foundation, self-described as an independent non-profit organization for producing and distributing educational films, was announced this week from its offices in New York City. It is stated that the organization is in no way controlled by or affiliated with any motion picture producer. It is, however, in some measure, an outgrowth of the educational film department of the Fox Film Corporation, an activity recently discontinued. Dr. Wallace W. Atwood, president of Clark University, is the newly elected president of the Foundation.

The new organization intends to produce three types of films, both sound and silent, in the standard 35 millimeter and 16 millimeter sizes. These will be the specialized classroom teaching film, the non-curriculum film for auditorium use and a number of special feature films for general distribution.

The announcement of the Film Foundation is made simultaneous with the preliminary presentation at preview showings of *The Cry of the World*, a survey of the World War's aftermath assembled from the talking film archives of Fox Movietone News. The picture is to go into general circulation with its earnings to be devoted to the further activities and production of the Foundation.

Victor Announces Cameras at Reduced Prices

Victor Animatograph Corporation, Davenport, Iowa, in announcing its new Model 3 and 5 Cameras and its new price policy, calls particular attention to the fact that these models are not old carried-over merchandise that is being offered at close-out prices, but new and improved products.

On the Model 5 Victor (the original visual focusing, 3-lens turret 16 mm. camera) there has been a reduction of approximately 22½ per cent in price. All of the previous well-known features of the Model 5, such as visual focusing, 5 speeds, 3-lens turret, etc., have been retained. The new features included are: attached winding crank which may also be employed for hand cranking; graduated "Adjustafinder" for accuracy in "finding" and centering the image at different distances; combination visible-audible film footage meter of high accuracy; film loop guard which is said to make impossible loss of the film loop; improved carrying handle; and a gold-flecked brown lava finish with polished chrome trim. Standard lens equipment on the Model 5 Camera is the 1", F 2.9 Hugo Meyer Trioplan.

The Popular Model 3 Victor, which was the first 16 mm. camera to be equipped with multiple operating speeds, including slow motion, is being offered with the new collapso-carrying strap, chrome plated chain-attached crank and crank clip, and with 20 mm. F 3.5 Fixed Focus Dallmeyer Lens at a price reduction of nearly 35 per cent.

Both the Model 3 and 5 Victors can be supplied with any choice of lens or lenses. Lenses of all makes, speeds and focal lengths are interchangeable on the two instruments.

Columbia Pictures
is serving the world with the best entertainment

Ask your dealer about our 16 mm. films.

information on the greatest and best selection of current pictures can be secured by addressing Dept. E, Columbia Pictures Corp., 729 Seventh Ave., New York City.

Write for Free Catalog 112-B.

Church Department

(*Concluded from page* 148)

and agricultural growth of St. Joseph Valley. The film is dedicated to Isaac McCoy, Fathers Allouez and Marquette, and Robert de La Salle."

Our impression is that many thoughtful clergymen all over the United States who are personally interested in the recrudescence of the rural church will be interested in viewing this film, especially that portion of it which has relation to the present-day activities of the parish.

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of The Educational Screen and Visual Instruction News, published monthly except July and August, at Morton, Ill., for April 1, 1932

State of Illinois, County of Cook, ss.

Before me, a notary public in and for the State and county aforesaid, personally appeared Nelson L. Greene, who, having been duly sworn according to law, deposes and says that he is the editor of The Educational Screen, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, The Educational Screen, Inc., 64 E. Lake Street, Chicago, Ill.

Editor, Nelson L. Greene, 64 E. Lake Street, Chicago, Ill.

Business Manager, Ellsworth C. Dent, 1812 Illinois St., Lawrence, Kansas.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

The Educational Screen, Inc., 64 E. Lake Street, Chicago, Ill.
Herbert E. Slaught, 5548 Kenwood Ave., Chicago.
Nelson L. Greene, 5836 Stoney Island Ave., Chicago.
Dudley G. Hays, 1641 Estes Ave., Chicago.
Frederick J. Lane, 6450 Kenwood Ave., Chicago.
Marguerite Orndorff, 1617 Central Ave., Indianapolis, Ind.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner: and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold and distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is ——. (This information is required from daily publications only.)

NELSON L. GREENE,
(Signature of editor, publisher, business manager or owner.)

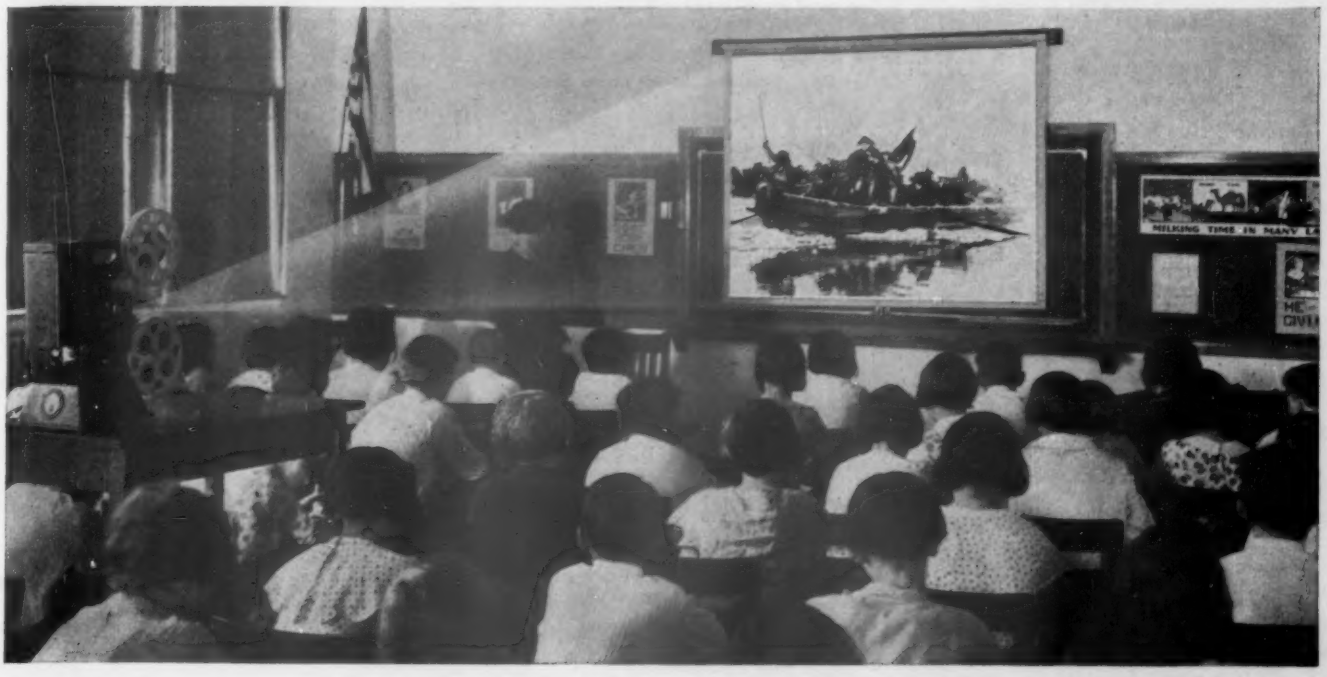
Sworn to and subscribed before me this 1st day of October, 1931.

(SEAL) MABEL GRANT.

(My commission expires August 28, 1932)

A Field Trip *into* History

makes the subject vivid...interesting



By presenting many subjects as living realities, Eastman Classroom Films stimulate the pupils' imagination and desire to learn

It takes a long flight of the imagination to recreate the new, strange ways and living conditions under which our forefathers established a European civilization on this continent and brought our nation into being.

How welcome, then, is the authentic motion picture of early historical events. How quickly it crystallizes vague conceptions into vivid understanding. How much easier it makes the comprehension of history—not only the part actually shown on the screen, but the whole subject.

No wonder so many schools have welcomed the Eastman Classroom Films on *George Washington, His Life and Times*—an accurate, moving presentation of colonial life, revolutionary days and the beginnings of the Republic.

Such a picture spurs children's imaginations into activity...makes the whole subject of history a vital thing. And what this picture accomplishes in history, other Eastman Classroom Films accomplish in geography, science, nature study, health, and other fields.

Eastman Classroom Films and equipment are not expensive. Write for complete information. Eastman Teaching Films, Inc. (Subsidiary of Eastman Kodak Company), Rochester, N. Y.

GEORGE WASHINGTON

His Life and Times

A Series of Eastman Classroom Films

This motion picture, the only one on Washington's life made at the request and with the coöperation of the George Washington Bicentennial Commission, is doubly valuable for teaching history and for patriotic activities. It gives an accurate picture of colonial life, frontier conditions, the causes and military action of the Revolution, and the early days of the Republic.

EASTMAN *Classroom Films*

HERE THEY ARE!

A Trade Directory for the Visual Field

FILMS

Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City.

Carlyle Ellis (1, 4)
53 Hamilton Terrace, New York City
Producer of Social Service Films

Columbia Pictures Corp. (3, 6)
729 Seventh Ave., New York City
(See advertisement on page 158)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Eastman Teaching Films, Inc. (1, 4)
Rochester, N. Y.
(See advertisement on page 159)

Edited Pictures System, Inc. (1, 4)
130 W. 46th St., New York City

General Electric Company (3, 6)
Visual Instruction Section,
Schenectady, N. Y.

Herman Ross Enterprises, Inc., (3, 6)
630 Ninth Ave., New York City
(See advertisement on page 153)

Ideal Pictures Corp. (1, 4)
26 E. Eighth St., Chicago, Ill.

Modern Woodmen of America (1, 4)
Rock Island, Ill.

Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.

Ray-Bell Films, Inc. (3, 6)
817 University Ave., St. Paul, Minn.

Society for Visual Education (1, 4)
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 130)

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Corp. (3)
730 Fifth Ave., New York City
(See advertisement on page 155)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

Y. M. C. A. Motion Picture Bureau (1, 4)
347 Madison Ave., New York City
300 W. Adams Bldg., Chicago, Ill.

MOTION PICTURE MACHINES and SUPPLIES

Ampro Projector Corp. (6)
2839 N. Western Ave., Chicago, Ill.
(See advertisement on inside front cover)

Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on inside back cover)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1)
130 W. 46th St., New York City

Ideal Pictures Corp. (1, 4)
26 E. Eighth St., Chicago, Ill.

Regina Photo Supply Ltd. (3, 6)
1924 Rose St., Regina, Sask.

United Projector and Film Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (6)
Davenport, Ia.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da-Lite Screen Co.
2721 N. Crawford Ave., Chicago
(See advertisement on page 133)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

C. W. Briggs Co.
628 Callowhill St., Philadelphia, Pa.
(See advertisement on page 157)

Eastman Educational Slides
Iowa City, Ia.

Edited Pictures System, Inc.
130 W. 46th St., New York City

Eye Gate House Inc.
330 W. 42nd St., New York City
(See advertisement on page 151)

George Washington Memorial Assn.
386 Fourth Ave., New York City
(See advertisement on page 154)

Ideal Pictures Corp.
26 E. Eighth St., Chicago, Ill.

International Artprints
64 E. Lake St., Chicago, Ill.

Keystone View Co.
Meadville, Pa.
(See advertisement on page 155)

Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 130)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 129)

Stillfilm Inc.
1052 Cahuenga Ave., Hollywood, Cal.
(See advertisement on page 153)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

Keystone View Co.
Meadville, Pa.
(See advertisement on page 155)

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.

E. Leitz, Inc.
60 E. 10th St., New York City
(See advertisement on page 152)

Regina Photo Supply Ltd.
1924 Rose St., Regina, Sask.

Society for Visual Education
327 S. LaSalle St., Chicago, Ill.
(See advertisement on page 130)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 129)

Stillfilm Inc.
1052 Cahuenga Ave., Hollywood, Calif.
(See advertisement on page 153)

Trans-Lux Daylight Pict. Screen Corp.
247 Park Ave., New York City
(See advertisement on page 151)

Williams, Brown and Earle Inc.
918 Chestnut St., Philadelphia, Pa.

REFERENCE NUMBERS

(1) indicates firm supplies 35 mm. silent.
(2) indicates firm supplies 35 mm. sound.
(3) indicates firm supplies 35 mm. sound and silent.
(4) indicates firm supplies 16 mm. silent.
(5) indicates firm supplies 16 mm. sound.
(6) indicates firm supplies 16 mm. sound and silent.

Endorsed by educators
because built to visual educators' wishes . . . . .

New Bell & Howell Filmo JL & M Projectors

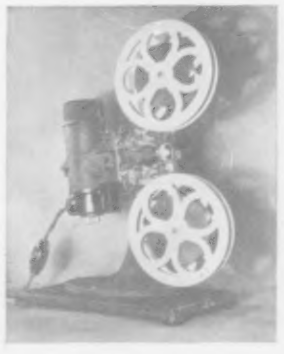
AT THE recent meeting of the National Education Association in Washington, educators were polled on their opinions of the new Filmo Model JL and Model M Projectors. Almost unanimously, they voted them ideal for school use:

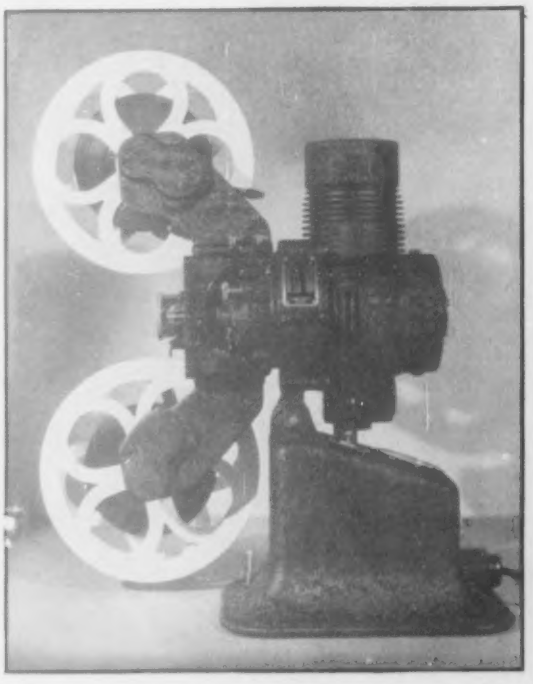
1. Because they retain the time-proved basic Filmo Projector design which has proved its quality over more than nine years and made it possible to say that *No Filmo Projector has ever worn out.*
2. Because on this sound base have been built two projectors which, each in its own province, meet visual educators' own specifications and all school requirements.

The educators favored the purchase of a Filmo JL when a most powerful projector is needed for showing brilliant pictures in a large auditorium and in classrooms that cannot be effectively darkened.

For the hundreds of cases where elementary and other teachers need a classroom projector that is sturdy, powerful, and of extreme simplicity, yet of ample illuminating power, the educators voted for the Model M. This single control Filmo has been "made to order," they said, for just this situation.

Let us prove to you that one (or both) of these projectors best meets the needs of your school and gives you most in projection years, in fine results, in convenience, in economy. Mail the coupon.





Here's the finest 16 mm. projector yet made for schools. 100% gear driven. Automatic rewind. New 400-watt, 100-volt Biplane Filament lamp for strongest, evenest illumination. Automatic pilot light. New tilting device. Illuminated voltmeter. Radio interference eliminator. Complete with case, $298.

•

Here (at left) is the answer to low first cost plus fine results and maximum durability . . . the new Filmo Model M Projector. Single control—a child can operate it. Mechanism and optical system essentially same as in Filmo models of higher price. Price, only $150.

BELL & HOWELL COMPANY
1817 Larchmont Avenue, Chicago, Illinois

Gentlemen: Please send me ☐ Descriptive literature on the new Filmo Model M Projector for Schools ☐ Model JL Projector ☐ A copy of "Filmo Motion Pictures in Visual Education." The length of our auditorium from back (or booth) to screen is ..... feet.

Name ..... Position .....

School .....

Address .....

City ..... State .....

FILMO

Personal Movie Cameras and Projectors

Made by Bell & Howell, the world's leading manufacturers of finest quality professional and personal movie equipment

PROFESSIONAL RESULTS WITH AMATEUR EASE

PROJECTION WITHOUT A BOOTH DEMANDS...

film that safeguards audience, building, and projectionist. Eastman *Safety* Film, with its cellulose acetate base, is such a material. With it you can feel just as secure as if you were handling a narrow roll of newsprint paper.

If you project without a booth, insist that all motion pictures shipped to you be printed on this film that *protects.* Before you show new reels, go over each one, from beginning to end, to see that the words "Eastman" "Kodak" "Safety" "Film" appear throughout the margin. Eastman Kodak Company. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

EASTMAN
SAFETY FILM